Actiontec®

USB/Ethernet

DSL Modem

Model #: GT701R

Firmware Version:
QW05.5-3.60.3.0.7.6-GT701

User Manual

Ver 1.1

Solutions for the Digital Life™

Downloaded from www.Manualslib.com manuals search engine

Table of Contents

1 Introduction 1
- Package Contents 1
- Minimum System Requirements 1
- Features 2
- Technical Support 5

2 Using Qwest DSL 9
- Connecting to the Internet 9
- Disconnecting from the Internet 9

3 Performing a Quick Setup 11
- Quick Setup 11
- Connection Status Box 14
- Changing the User Name and Password 15

4 Setting up Static IP Addresses 17
- Configuring for a Single Static IP Address 17
- Configuring for a Block of Static IP Addresses 21
- VIP Mode 24

5 Monitoring the Modem's Status 25
- General Status 25
- IP Traffic QoS Status 26
- LAN Status 26
- NAT Table 27
- Routing Table 27
- WAN Status 28
- Active User List 29

6 Configuring Advanced Settings 31
- Accessing Advanced Setup 31
- Services Blocking 32
- Website Blocking 33
- DSL Settings 33
- DHCP Settings 34
- LAN IP Address 35
- WAN IP Address 36
- IP QoS Settings Upstream 40
- IP QoS Settings Downstream 42
- Remote Management/Telnet 43
- Dynamic Routing (RIP) 44
- Static Routing 44
- Admin User Name and Password 45
- Advanced Port Forwarding 46
- Applications 47
- DMZ Hosting 48
- Firewall 48
- NAT (Network Address Translation) 49

Downloaded from www.Manualslib.com manuals search engine

7 Using the Modem's Utilities 51
Reboot 52
Restore Default Settings 53
Upgrade Firmware 53
Web Activity Log 54
8 Troubleshooting 55
A Reference 59
Locating Computer Information 59
Locating Windows Operating System Files 60
B Setting up Static IP on a Computer 63
Windows 98 SE 63
Windows Me 66
Windows 2000 69
Windows XP 73
C Computer Security 77
Comparing DSL Service with a Dial-Up Modem 77
Modem Security 78
Computer Security 78
Electronic Security 79
D Specifications 81
General 81
LED Indicators 82
Environmental 82
E Glossary 83
F Firewall Security Levels 87
Off (No Firewall Security) 87
Low Security Level 88
Medium Security Level 89
High Security Level 90
Custom Security Level 91
G Setting up a Non-Windows System 93
Classic 93
OS X 95
Connecting to the ISP 96
H Additional Technical Support Options 99
Self Help 99
Basic Setup Support: Getting Online 99
Advanced Feature Support 100
Networking (LAN) Support 100

Downloaded from www.Manualslib.com manuals search engine

Notices **103**
Regulatory Compliance Notices 103
Modifications 103
Miscellaneous Legal Notices 104
Limited Warranty **105**

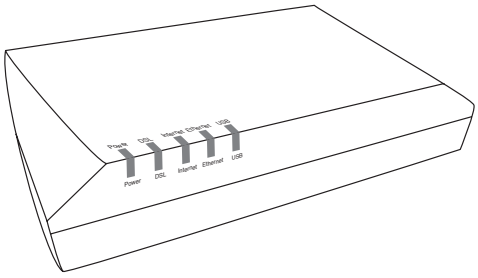
Downloaded from www.Manualslib.com manuals search engine

This page left intentionally blank.

Downloaded from www.Manualslib.com manuals search engine

Introduction 1

Thank you for purchasing the Actiontec USB/Ethernet DSL Modem. The Modem is the simplest way to connect computers to a high-speed broadband connection. This easy-to-use product is perfect for the office or small business. If you want to take your computing to the next level, the Actiontec USB/Ethernet DSL Modem is sure to be one of the keys to your success.



Package Contents

- Actiontec USB/Ethernet DSL Modem
- Power adapter
- Phone filters (provided by Qwest)
- DSL cable
- Ethernet cable
- USB cable
- Installation CD-ROM (provided by Qwest)
- Welcome letter (provided by Qwest)

Minimum System Requirements

- Active DSL service
- Computer with an 10 Mbps or 10/100 Mbps Ethernet connection, or USB connection

Downloaded from www.Manualslib.com manuals search engine

- Microsoft Windows 98 Second Edition (SE), Windows Millennium Edition (Me), Windows NT 4.0, Windows 2000, Windows XP, Mac OS 9.0 - 9.2.1, or Mac OS X+

Note: USB LAN port is not supported with Microsoft NT 4.0 or Mac OS.

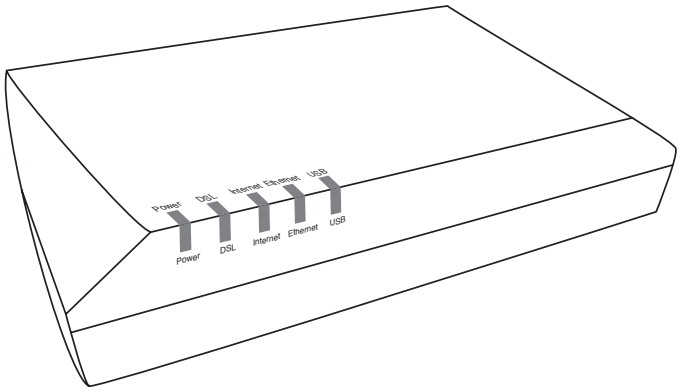
- Internet Explorer 5.0 or higher (6.x recommended) or Netscape Navigator 4.0 or higher (4.7 recommended)
- TCP/IP network protocol installed on each computer

Features

This section contains a quick description of the Modem's lights, ports, etc. The Modem has several indicator lights (LEDs) on its front panel and a series of ports on its rear panel.

Front Panel

The front panel of the Modem features five lights: Power, DSL, Internet, Ethernet, and USB.



Downloaded from www.Manualslib.com manuals search engine

Power Light

The Power light displays the Modem's current status. If the Power light glows steadily green, the Modem is receiving power and fully operational. When it is rapidly flashing, the Modem is initializing. If the Power light is not illuminated or glows solid red or amber when the power cord is plugged in, the Modem has suffered a critical error and technical support should be contacted.

DSL Light

The DSL light illuminates when the Modem is connected to a live DSL line. If the DSL light is flashing, the Modem is attempting to establish DSL connectivity.

Internet Light

When the Internet light glows steadily green, the Modem is connected to the DSL provider. When it glows steadily red, the Modem has failed to connect to the ISP.

☞ ***Note***: The Internet light may flicker green, which indicates that IP traffic is being transmitted.

Ethernet Light

The Ethernet light illuminates when the Modem is connected via its Ethernet Port.

☞ ***Note***: The Ethernet light may flicker green, which indicates that IP traffic is being transmitted.

USB Light

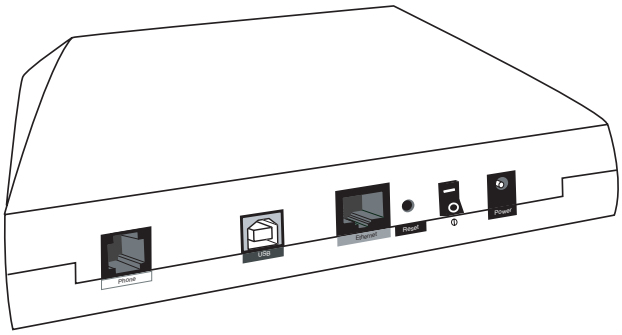
The USB light illuminates when the Modem is connected via its USB port.

☞ ***Note***: The USB light may flicker green, which indicates that IP traffic is being transmitted.

Downloaded from www.Manualslib.com manuals search engine

Rear Panel

The rear panel of the Modem contains four ports (Phone, USB, Ethernet, and Power), as well as a Power switch and Reset button.



Phone Port

The Phone port is used to connect a DSL (Digital Subscriber Line) connection to the Modem.

USB Port

The USB port is used to connect a computer to the Modem via USB cable.

Ethernet Port

The Ethernet port is used to connect computers to the Modem via Ethernet cable, and is a 10/100 Mbps port.

Reset Button

To restore the Modem's factory default settings, depress and hold the Reset button for approximately 10 seconds, or until the Power light glows amber. The reset process will start about 10 seconds after releasing the Reset button.

Power Switch

The Power switch turns the Modem on and off (on if the top part of the switch is depressed, off if the bottom is depressed).

Downloaded from www.Manualslib.com manuals search engine

Power Port

The Power port is used to connect the power cord to the Modem.

Warning: Do not unplug the power cord from the Modem during the reset process. Doing so may result in permanent damage to the Modem.

Technical Support

Self Help

To obtain answers to DSL configuration questions, visit the Qwest DSL Actiontec support page at this address:
`http://www.qwest.com/internethelp/`

Basic Setup Support

If unable to access the Internet, look at the Internet light on the front of the DSL Modem. If the light is **solid green**, call the ISP immediately. If it is **not solid green**, call Qwest at 1-800-247-7285.

Other Problems

Contact the ISP if experiencing problems with:

- DHCP addressing configuration
- Static IP addressing configuration
- Transparent bridging configuration

Contact Qwest at 1-800-247-7285 for:

- DSL service outage support and repair
- DSL service installation support

Note: Before attempting any of the above, make sure access to the Internet is available.

Downloaded from www.Manualslib.com manuals search engine

Advanced Feature Support

Qwest DSL technical support provides the following advanced feature support for the *Action*tec DSL Gateway. Contact Qwest at 1-800-247-7285 for configuration assistance.

- Enabling Website Blocking
- Enabling VPN Pass-Through
- Enabling/Disabling NAT
- Firewall configuration
- Changing the LAN IP address of the DSL Gateway
- Enabling Services Blocking
- Enabling/Disabling DHCP
- VIP feature

These features are supported in the Modem only. Implementation of the above features within the network (LAN) is not supported.

Upgrade Installation

Upgrade installation support is available from Actiontec free of charge if the equipment was purchased from Actiontec.

Networking (LAN) Support

If a network has been set up and support is needed in one of the following areas:

- LAN support of multiple computers and peripherals;
- Microsoft Windows Networking;
- Advanced LAN configuration with multiple computers;

contact the **Actiontec Pay For Support Center** at 1-888-825-9025. Actiontec networking support is provided for a fee of $29.95 per incident.

Downloaded from www.Manualslib.com manuals search engine

Other fee-based feature support includes:

- Port Forwarding (Static NAT)
- Static Routing
- MAC Address Cloning
- DMZ Hosting
- NAT Routes
- RIP (Dynamic Routing)

This support service does not include an on-site field technician.

To purchase Actiontec wireless cards and peripherals, visit the Actiontec Web site at **www.actiontecstore.com/qwest**

Downloaded from www.Manualslib.com manuals search engine

This page left intentionally blank.

Downloaded from www.Manualslib.com manuals search engine

Using Qwest DSL 2

Qwest DSL operates over home or business phone lines equipped with Qwest DSL service. For this reason, the Qwest DSL connection is not portable; it can't be accessed while away from the home or business. To connect while traveling, ask the ISP about a dial-up account. Most Qwest DSL ISPs provide a dial-up account for free, while others charge a minimal fee.

Qwest DSL is a highly reliable service, but it is possible to have a dial-up connection in the unlikely event that problems arise with the DSL service. Most Qwest DSL ISPs provide a dial-up account for free. If not, there are a number of free Internet providers whose products make great backup Internet access in the unlikely event they are ever needed.

Connecting to the Internet

Whether connecting via Point-to-Point Protocol (PPPoE, PPPoA) or Bridging Mode (RFC 1483), after connecting and configuring the Modem, the Internet connection is always on. Therefore, to connect or reconnect to the Internet, simply turn on your computer, open the Web browser and go to the Web site of your choice. No further set up is needed.

Disconnecting from the Internet

Closing the Web browser does not disconnect you from the Internet. To fully disconnect, turn off your computer.

Downloaded from www.Manualslib.com manuals search engine

This page left intentionally blank.

Downloaded from www.Manualslib.com manuals search engine

Performing a Quick Setup

3

This chapter is a guide through a quick and basic setup of the Modem, and includes instructions on how to connect the Modem to the ISP and change the Modem's user name and password.

To complete a quick setup, the user will need information provided by the ISP. This information is sometimes contained in a welcome letter or ISP worksheet. If this document is not available, contact the ISP immediately and request one.

Quick Setup

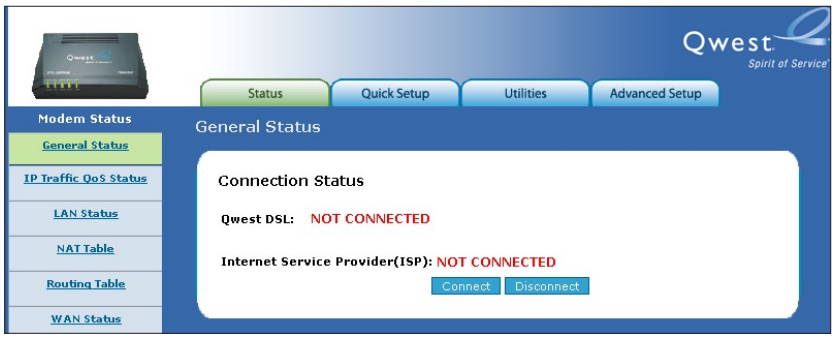
To configure the Modem for basic operation:

1. Open the Web browser. In the "Address" text box type:

   `http://192.168.0.1`

   then press **Enter** on the keyboard.

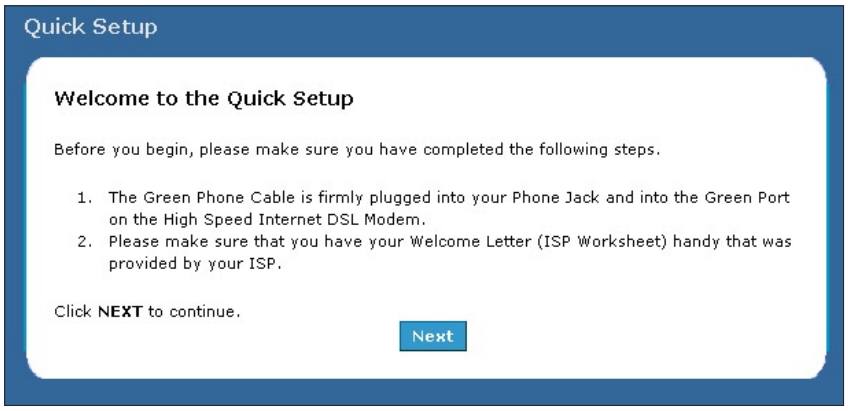
2. The Home screen appears, set to the "Status" tab. Select **Quick Setup** from the row of tabs at the top.



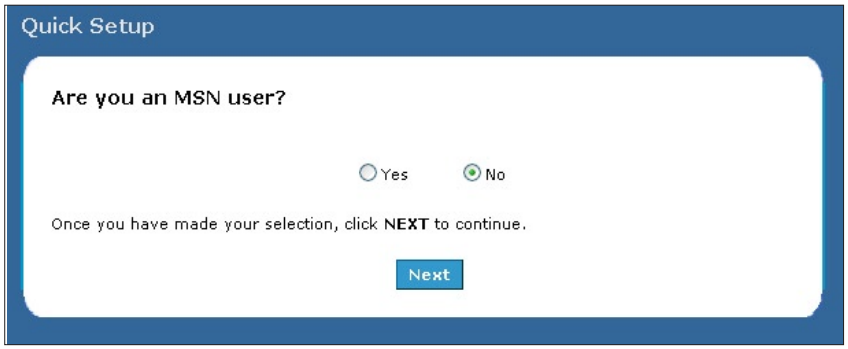
☞ ***Note***: If the Home screen does not appear, make sure the Ethernet cable is properly connected to the Modem.

Downloaded from www.Manualslib.com manuals search engine

3. The "Welcome to the Quick Setup" screen appears. Follow the on-screen instructions, then click **Next**.

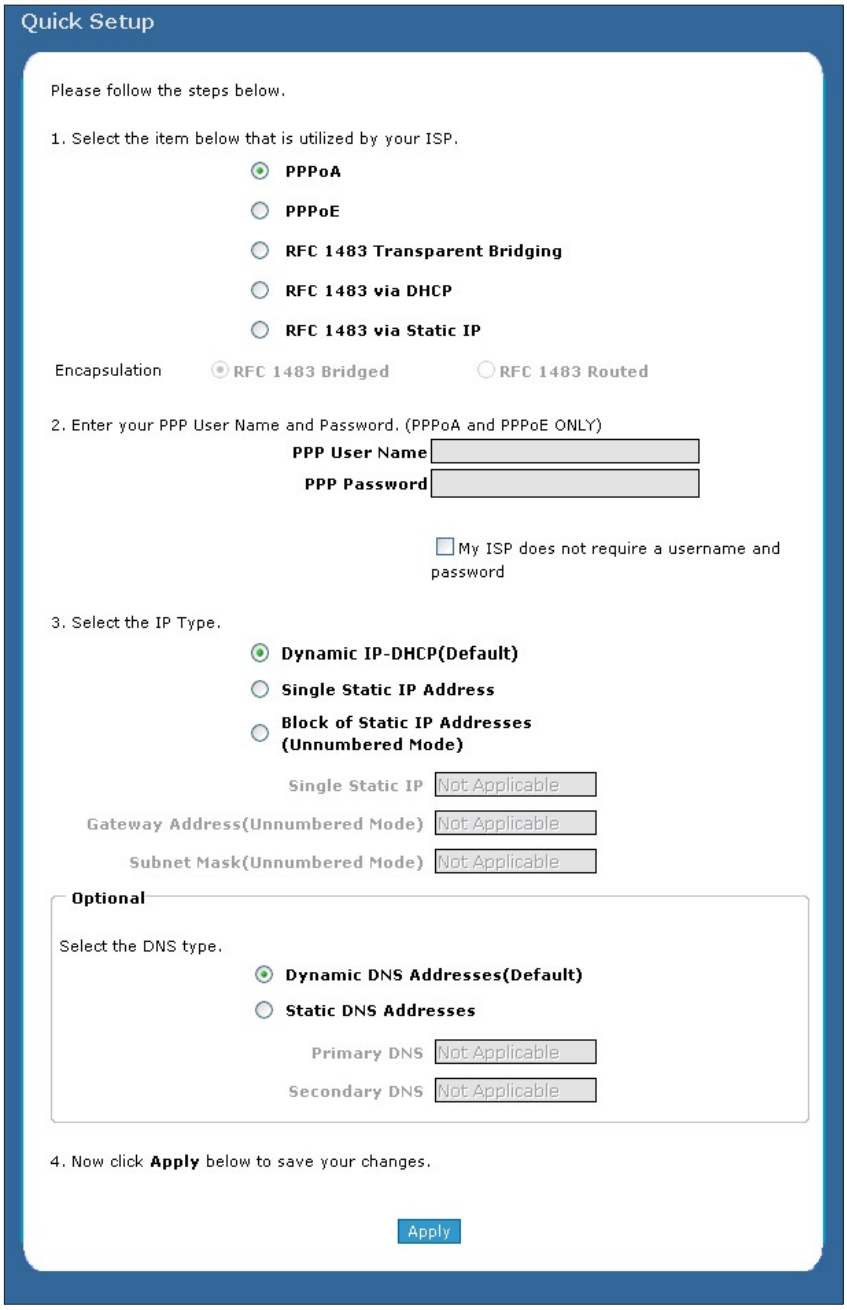

Quick Setup
Welcome to the Quick Setup
Before you begin, please make sure you have completed the following steps.
1. The Green Phone Cable is firmly plugged into your Phone Jack and into the Green Port on the High Speed Internet DSL Modem.
2. Please make sure that you have your Welcome Letter (ISP Worksheet) handy that was provided by your ISP.
Click NEXT to continue.
Next

4. In the next screen, select whether MSN (Microsoft Network) is being used by clicking the "Yes" or "No" radio button, then click **Next**.



Downloaded from www.Manualslib.com manuals search engine

5. In the next screen, select the type of connection provided by the ISP by clicking in the radio button next to "PPPoA" or "PPPoE." If unsure about the selection, check the information provided by the ISP.



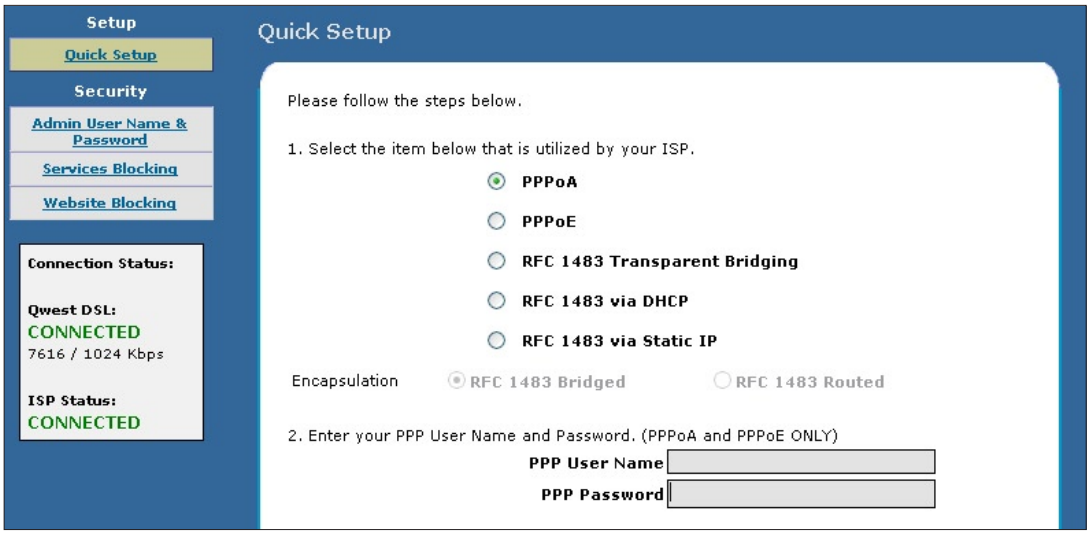
6. Enter the user name and password provided by the ISP in the appropriate text boxes, then click in the radio button next to "Dynamic IP-DHCP."
Click **Apply**.

☞ ***Note:*** If setting up the Modem with a single static IP address or a block of static IP addresses, see chapter 4, "Setting up Static IP Addresses," on page 15 to configure the Modem.

Downloaded from www.Manualslib.com manuals search engine

7. Make sure the Internet light on the front of the Modem glows solid green. This may take a few moments.

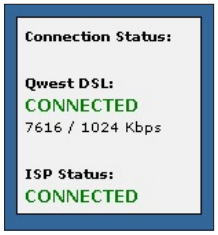
8. When the solid green light appears, click **Apply** in the Basic Setup screen. The "ISP Status" (on the left side of the screen) now displays "Connected."



The Modem is properly configured and connected to the Internet.

Connection Status Box

To quickly view the status of the Modem's connection, locate the "Connection Status" box, which is displayed at the bottom of the menu on the left side of all of the Modem's GUI screens.



This box displays the status of the Qwest DSL connection, as well as its connection speed (upstream/downstream). It also displays the status of the ISP connection.

Downloaded from www.Manualslib.com manuals search engine

Changing the User Name and Password

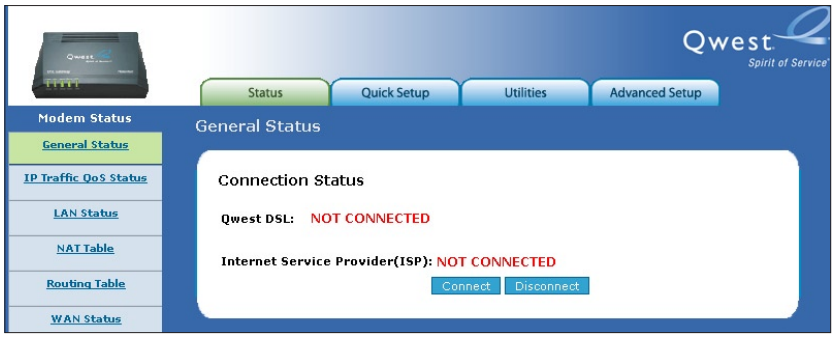
To change the user name and password (needed to access the Modem's GUI):

1. Open the Web browser. In the "Address" text box type:

   `http://192.168.0.1`

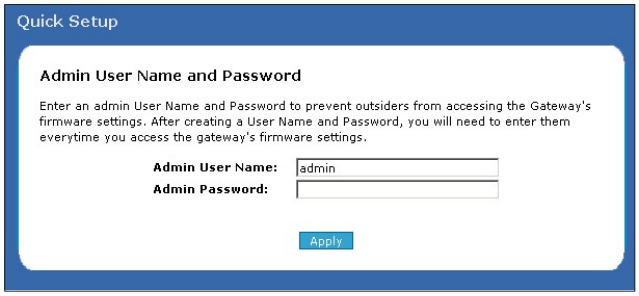
   then press **Enter** on the keyboard.

2. The Qwest Home screen appears, set to the "Status" tab. Select **Quick Setup** from the row of tabs at the top.



3. Select **Admin User Name & Password** from the menu on the left side.

4. The "Admin User Name and Password" screen appears. Enter a new user name (optional) in the "Admin User Name" text box, then a password in the "Admin Password" text box. Make sure to write the user name and password down and keep them in a secure location. They will be needed to access to the Modem's Graphical User Interface screens in the future.


Quick Setup
Admin User Name and Password
Enter an admin User Name and Password to prevent outsiders from accessing the Gateway's firmware settings. After creating a User Name and Password, you will need to enter them everytime you access the gateway's firmware settings.
Admin User Name: admin
Admin Password:
Apply

5. Click **Apply**. The Modem saves the settings and returns to the Home screen.

The Modem's user name and password are changed.

Downloaded from www.Manualslib.com manuals search engine

This page left intentionally blank.

Downloaded from www.Manualslib.com manuals search engine

Setting up Static IP Addresses

4

This chapter details how to set up the Modem with a static IP address. The first section explains the configuration using a single static IP address; the second section explains the configuration using a block of static IP addresses.

Configuring for a Single Static IP Address

To set up the Modem to use a single static IP address:

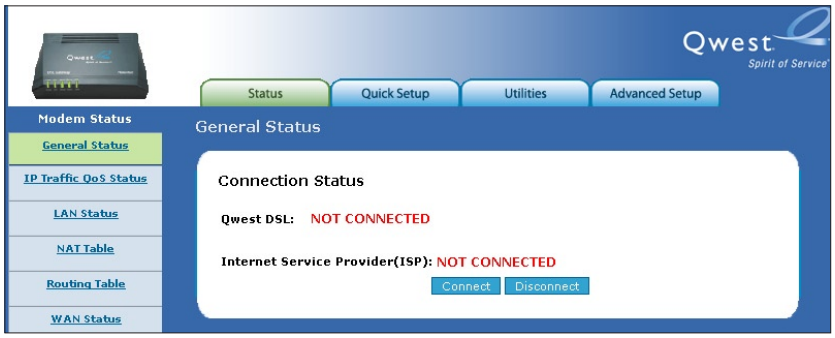
☞ ***Note***: To complete this procedure, the Internet Service Provider (ISP) worksheet or welcome letter must be available to consult. If no worksheet has been provided, contact the ISP.

1. Open the Web browser. In the "Address" text box type:

`http://192.168.0.1`

then press **Enter** on the keyboard.

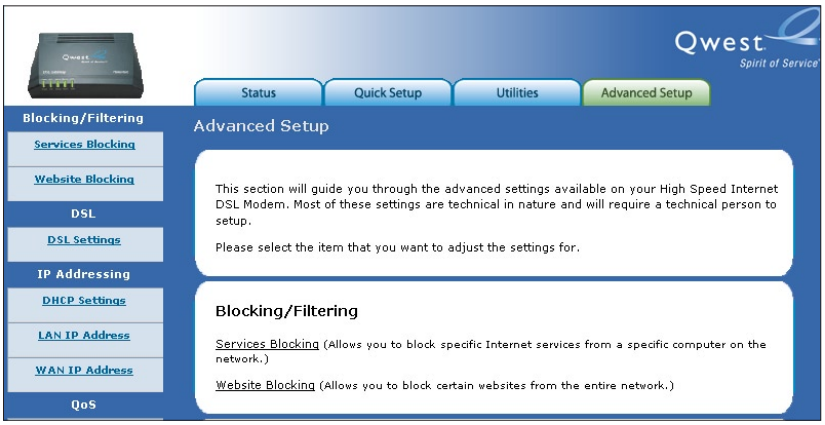
2. The Qwest Home screen appears, set to the "Status" tab. Select **Advanced Setup** from the row of tabs at the top.



☞ ***Note***: If the Qwest Home screen does not appear, make sure the Ethernet cable is properly connected to the Modem.

Downloaded from www.Manualslib.com manuals search engine

3. The "Advanced Setup" tab appears. Select **WAN IP Address** from the menu on the left side of the screen.

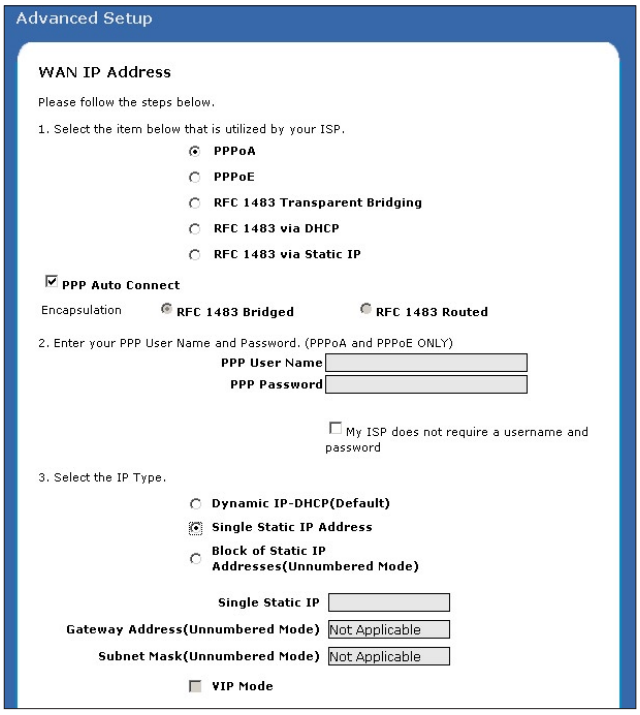

Qwest
Spirit of Service
Status
Quick Setup
Utilities
Advanced Setup
Blocking/Filtering
Services Blocking
Website Blocking
DSL
DSL Settings
IP Addressing
DHCP Settings
LAN IP Address
WAN IP Address
QoS
Advanced Setup
This section will guide you through the advanced settings available on your High Speed Internet DSL Modem. Most of these settings are technical in nature and will require a technical person to setup.
Please select the item that you want to adjust the settings for.
Blocking/Filtering
Services Blocking (Allows you to block specific Internet services from a specific computer on the network.)
Website Blocking (Allows you to block certain websites from the entire network.)

4. A "Warning" screen appears. Read the on-screen information, then click **Yes**.

Advanced Setup
WAN IP Address
WARNING!!
Any changes made to the WAN IP Address will reset some of the other settings on the modem. Do not proceed forward unless you have been instructed to do so by your ISP support personnel.
Do you want to proceed?
Yes
No

Downloaded from www.Manualslib.com manuals search engine

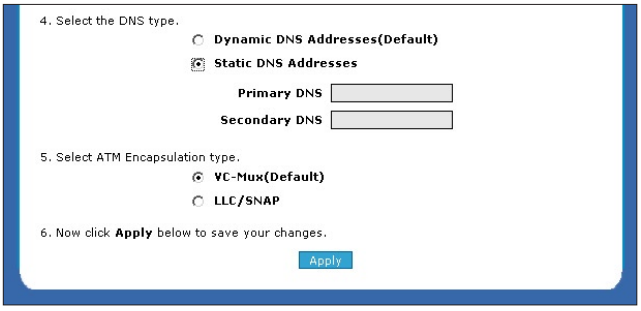
5. The "WAN IP Address" screen appears. Scroll down to step 3, "Select the IP type," and click in the circle next to "Single Static IP Address."



6. Enter the IP address obtained from the ISP worksheet in the "Single Static IP" text box.

☞ ***Note***: The "Gateway Address" and "Subnet Address" text boxes are not used during this procedure.

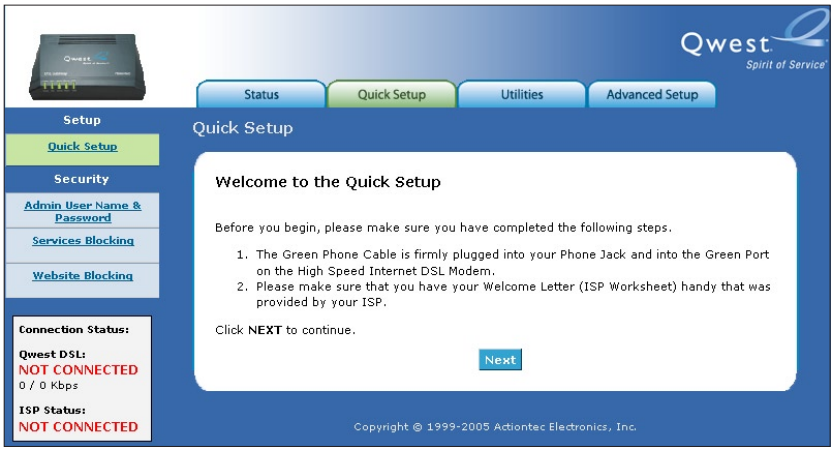
7. If provided with DNS settings on the ISP worksheet, scroll down to "Select the DNS type." Click in the circle next to "Static DNS Addresses" and enter the DNS addresses in the appropriate text boxes.
If no DNS settings were provided, skip this step and go to step 8.



8. Click **Apply**.

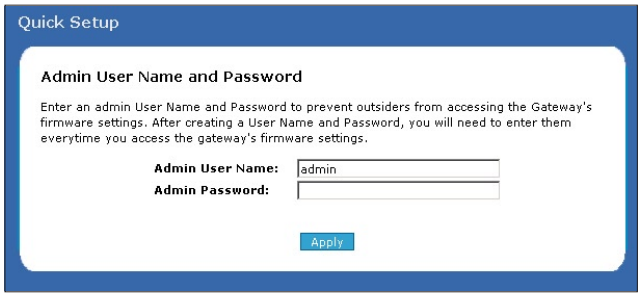
Downloaded from www.Manualslib.com manuals search engine

9. The Modem saves the settings and returns to the Home screen. Select **Quick Setup** from the row of tabs at the top of the screen to generate the "Quick Setup" tab.


Qwest
Spirit of Service
Status
Quick Setup
Utilities
Advanced Setup
Setup
Quick Setup
Security
Admin User Name & Password
Services Blocking
Website Blocking
Connection Status:
Qwest DSL:
NOT CONNECTED
0 / 0 Kbps
ISP Status:
NOT CONNECTED
Quick Setup
Welcome to the Quick Setup
Before you begin, please make sure you have completed the following steps.
1. The Green Phone Cable is firmly plugged into your Phone Jack and into the Green Port on the High Speed Internet DSL Modem.
2. Please make sure that you have your Welcome Letter (ISP Worksheet) handy that was provided by your ISP.
Click NEXT to continue.
Next
Copyright © 1999-2005 Actiontec Electronics, Inc.

10. Select **Admin User Name & Password** from the menu on the left side.

11. The "Admin User Name and Password" screen appears. Enter a new user name (optional) in the "Admin User Name" text box, then a password in the "Admin Password" text box. Make sure to write the user name and password down and keep them in a secure location. They will be needed to access the Modem's Graphical User Interface screens in the future.


Quick Setup
Admin User Name and Password
Enter an admin User Name and Password to prevent outsiders from accessing the Gateway's firmware settings. After creating a User Name and Password, you will need to enter them everytime you access the gateway's firmware settings.
Admin User Name:
admin
Admin Password:
Apply

12. Click **Apply**. The Modem saves the settings and returns to the Home screen.

The Modem has been configured to support a single static IP address.

Downloaded from www.Manualslib.com manuals search engine

Configuring for a Block of Static IP Addresses

To set up a the Modem to use a block of static IP addresses:

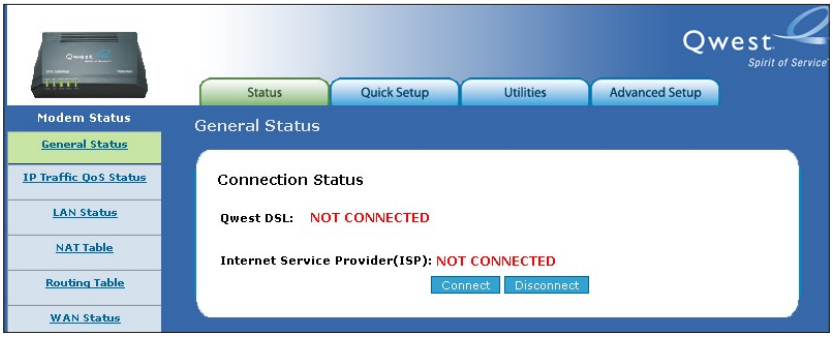
☞ ***Note***: To complete this procedure, the Internet Service Provider (ISP) worksheet or welcome letter must be available to consult. If no worksheet has been provided, contact the ISP.

1. Open the Web browser. In the "Address" text box type:

`http://192.168.0.1`

then press **Enter** on the keyboard.

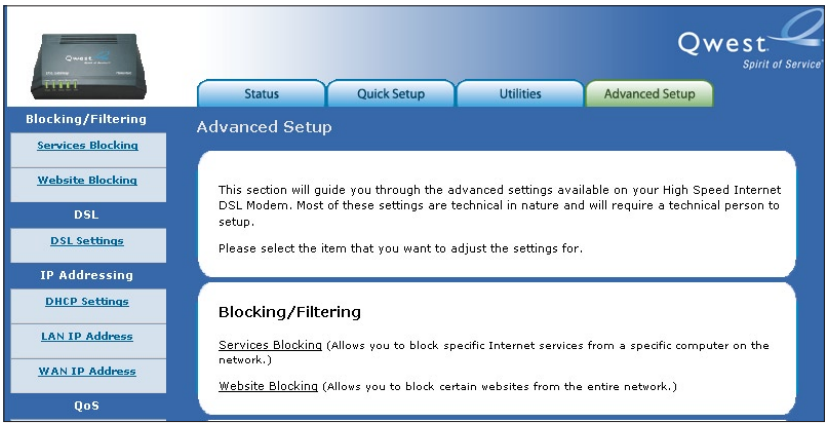
2. The Home screen appears, set to the "Status" tab. Select **Advanced Setup** from the row of tabs at the top of the screen



☞ ***Note***: If the Home screen does not appear, make sure the Ethernet cable is properly connected to the Modem.

Downloaded from www.Manualslib.com manuals search engine

3. The "Advanced Setup" tab appears. Select **WAN IP Address** from the menu on the left side of the screen.

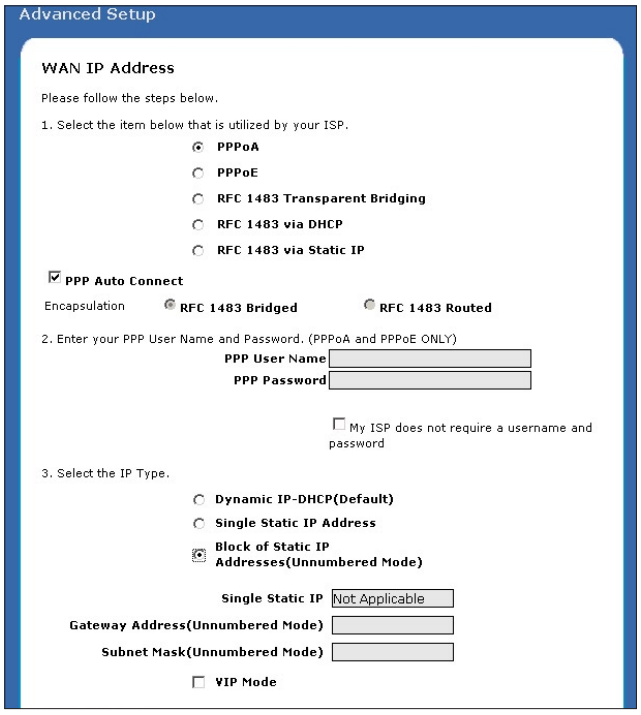

Qwest
Spirit of Service
Status
Quick Setup
Utilities
Advanced Setup
Blocking/Filtering
Services Blocking
Website Blocking
DSL
DSL Settings
IP Addressing
DHCP Settings
LAN IP Address
WAN IP Address
QoS
Advanced Setup
This section will guide you through the advanced settings available on your High Speed Internet DSL Modem. Most of these settings are technical in nature and will require a technical person to setup.
Please select the item that you want to adjust the settings for.
Blocking/Filtering
Services Blocking (Allows you to block specific Internet services from a specific computer on the network.)
Website Blocking (Allows you to block certain websites from the entire network.)

4. A "Warning" screen appears. Read the on-screen information, then click **Yes**.

Advanced Setup
WAN IP Address
WARNING!!
Any changes made to the WAN IP Address will reset some of the other settings on the modem. Do not proceed forward unless you have been instructed to do so by your ISP support personnel.
Do you want to proceed?
Yes
No

Downloaded from www.Manualslib.com manuals search engine

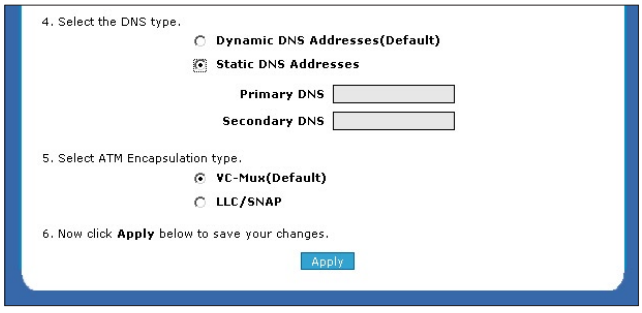
5. The "WAN IP Address" screen appears. Scroll down to "Select the IP type," click on the circle next to "Block of Static IP Addresses."



6. Enter the Gateway and Subnet Mask addresses obtained from the ISP worksheet in the appropriate text boxes.

7a. If provided with DNS settings on the ISP worksheet, scroll down to "Select the DNS type." Click the circle next to "Static DNS Addresses" and enter the DNS addresses in the appropriate text boxes. Go to step 8.

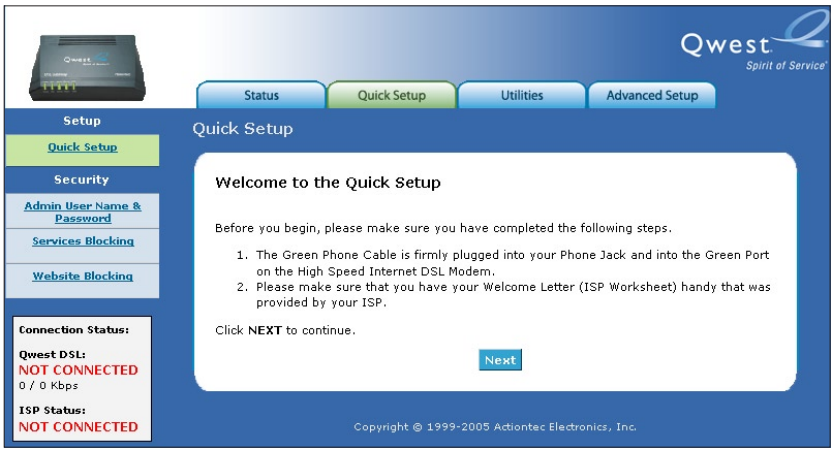
7b. If no DNS settings were provided on the ISP worksheet, scroll down to "Select the DNS type." Click the circle next to "Dynamic DNS Address." Go to step 8.



8. Click **Apply**.

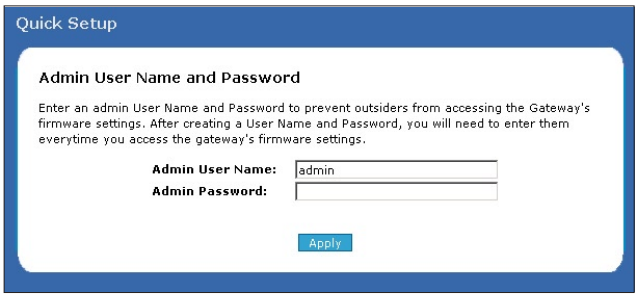
Downloaded from www.Manualslib.com manuals search engine

9. The Modem saves the settings and returns to the Home screen. Select **Quick Setup** from the row of tabs to generate the "Quick Setup" tab.


Qwest
Spirit of Service
Status
Quick Setup
Utilities
Advanced Setup
Setup
Quick Setup
Security
Admin User Name & Password
Services Blocking
Website Blocking
Connection Status:
Qwest DSL:
NOT CONNECTED
0 / 0 Kbps
ISP Status:
NOT CONNECTED
Quick Setup
Welcome to the Quick Setup
Before you begin, please make sure you have completed the following steps.
1. The Green Phone Cable is firmly plugged into your Phone Jack and into the Green Port on the High Speed Internet DSL Modem.
2. Please make sure that you have your Welcome Letter (ISP Worksheet) handy that was provided by your ISP.
Click NEXT to continue.
Next
Copyright © 1999-2005 Actiontec Electronics, Inc.

10. Select **Admin User Name & Password** from the menu on the left side.

11. The "Admin User Name and Password" screen appears. Enter a new user name (optional) in the "Admin User Name" text box, then a password in the "Admin Password" text box. Make sure to write the user name and password down and keep them in a secure location. They will be needed to access to the Modem's Graphical User Interface screens in the future.


Quick Setup
Admin User Name and Password
Enter an admin User Name and Password to prevent outsiders from accessing the Gateway's firmware settings. After creating a User Name and Password, you will need to enter them everytime you access the gateway's firmware settings.
Admin User Name:
admin
Admin Password:
Apply

12. Click **Apply**. The Modem saves the settings and returns to the Home screen.

The Modem has been configured to support a block of static IP addresses.

VIP Mode

This feature is used in conjunction with Unnumbered Mode. When VIP Mode is activated, the Modem uses NAT for private IP addressing for the local area network (LAN), allowing both public IP addressing and private IP addressing to be configured to the LAN simultaneously, while the DHCP server is reserved for private IP addressing. All computers using public IP addresses with Unnumbered Mode must have the public IP addresses statically assigned.

Downloaded from www.Manualslib.com manuals search engine

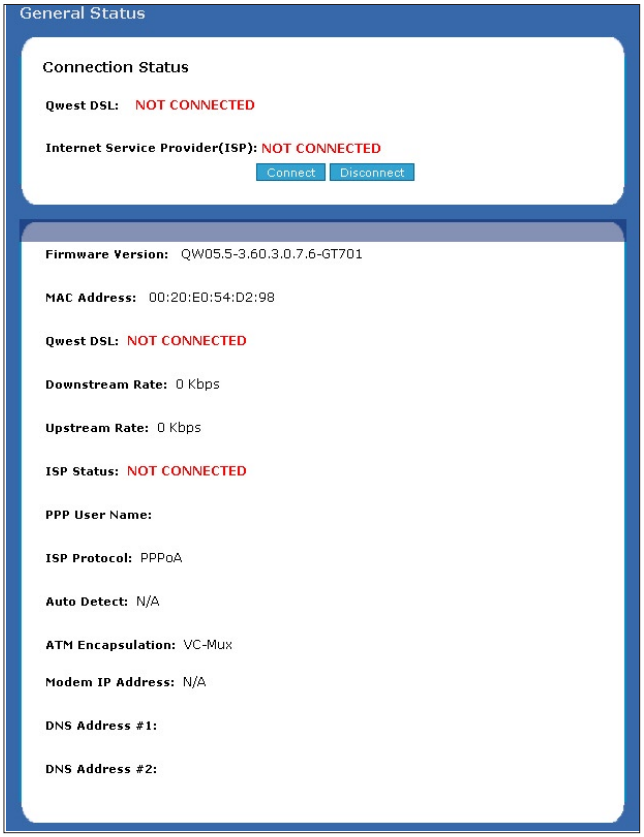
Monitoring the Modem's Status

5

After configuring the Modem, settings can be viewed by selecting the "Status" tab in the Home screen. Most of these settings are not modifiable from these screens. The Status options include **General Status**, **IP Traffic QoS Status**, **LAN Status**, **NAT Table**, **Routing Table**, **WAN Status**, and **Active User List**.

General Status

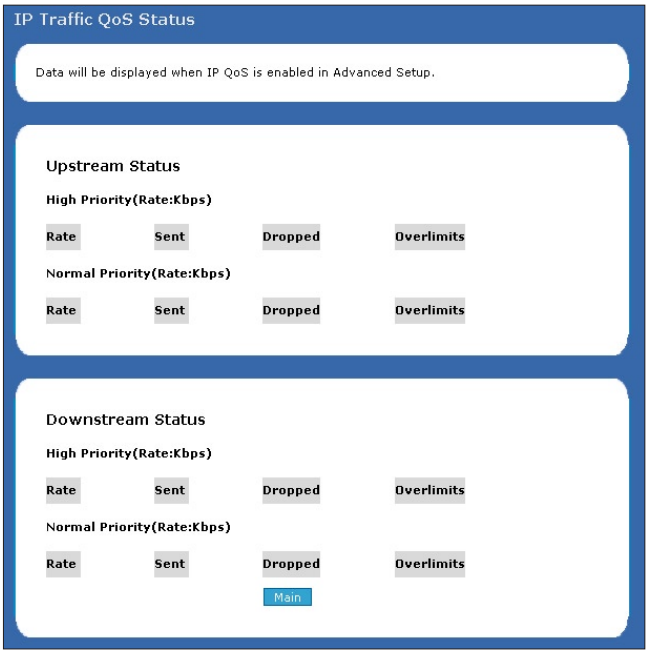
Selecting **General Status** from the Status tab generates the "General Status" screen, which displays many of the Modem's settings. No settings (other than connecting or disconnecting from the Internet) can be changed from the General Status screen.



Downloaded from www.Manualslib.com manuals search engine

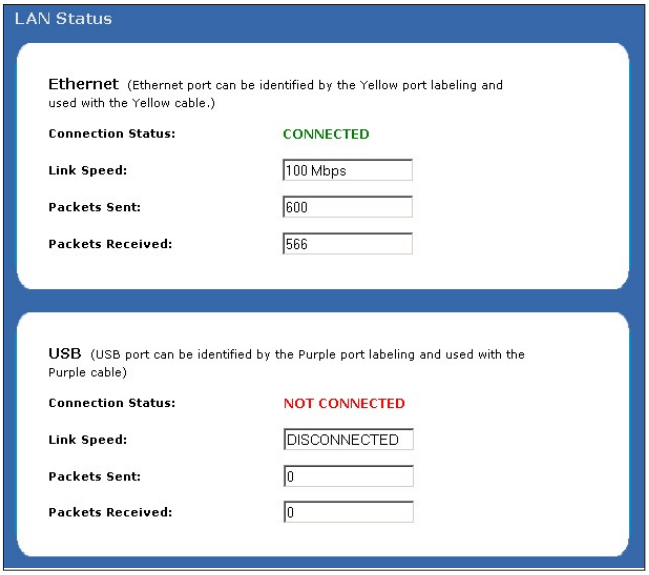
IP Traffic QoS Status

Selecting **IP Traffic QoS Status** from the Status tab generates the "IP Traffic QoS Status" screen, which displays various aspects of the QoS settings and rates of the Modem. Use in conjunction with the Modem's QoS settings (see page 38).



LAN Status

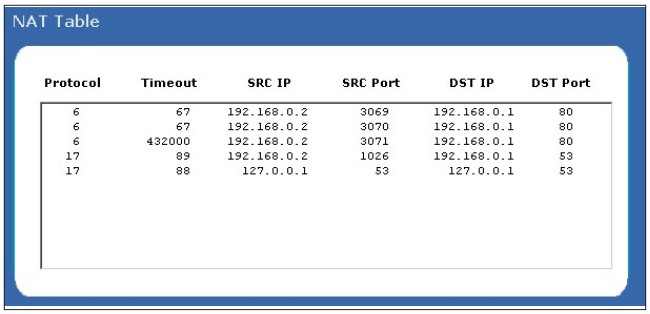
Selecting **LAN Status** from the Status tab generates the "LAN Status" screen. This screen displays on overview of the Modem's LAN (local area network) connections.



Downloaded from www.Manualslib.com manuals search engine

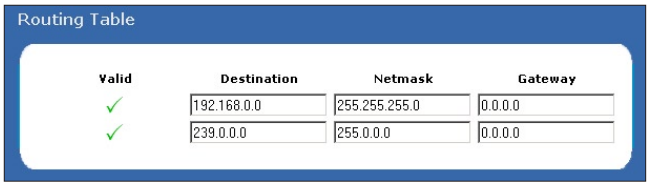
NAT Table

Selecting **NAT Table** from the Status tab generates the "NAT Table" screen. This screen displays details concerning the Modem's NAT (Network Address Translation) settings.



Routing Table

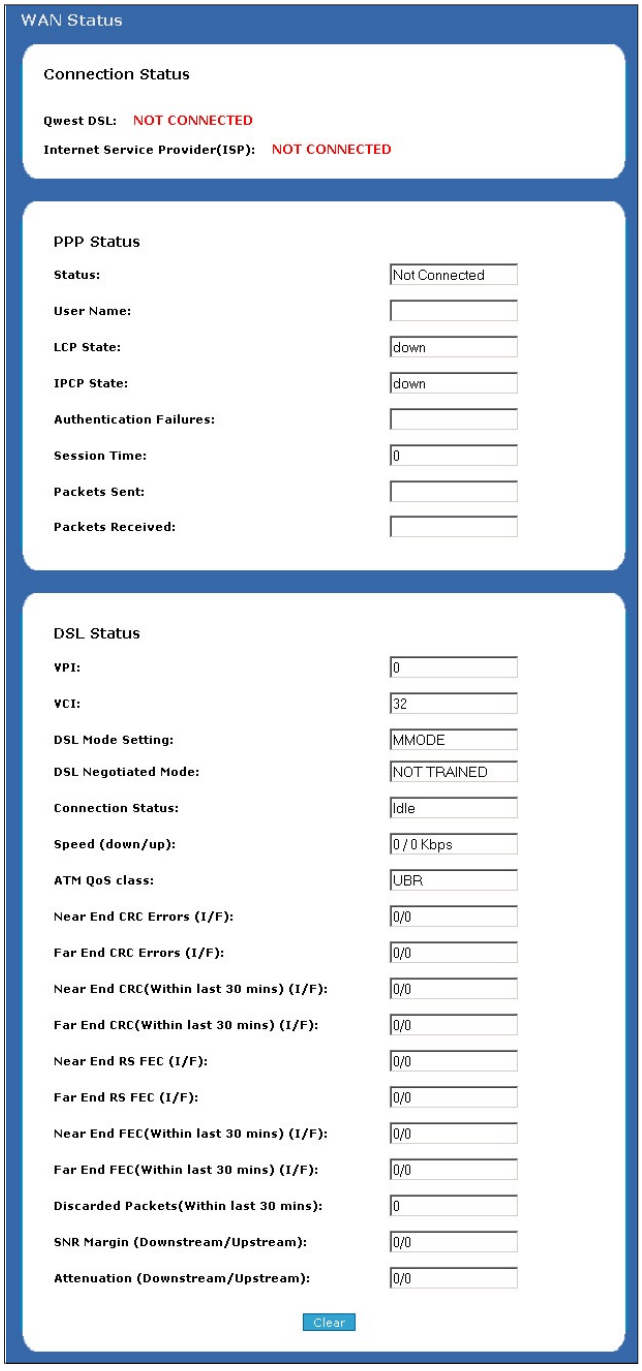
Selecting **Routing Table** from the Status tab generates the "Routing Table" screen. This screen displays on overview of the Modem's routes.



Downloaded from www.Manualslib.com manuals search engine

WAN Status

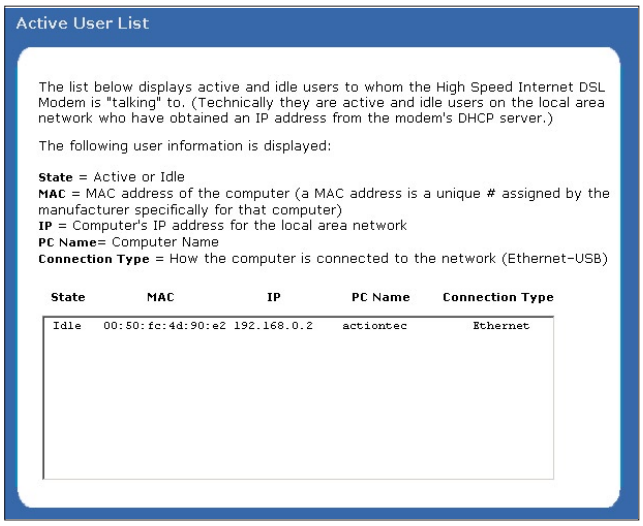
Selecting **WAN Status** from the Status tab generates the "WAN Status" screen. This screen displays on overview of the Modem's WAN (wide area network) connection.


WAN Status
Connection Status
Qwest DSL: NOT CONNECTED
Internet Service Provider(ISP): NOT CONNECTED
PPP Status
Status: Not Connected
User Name:
LCP State: down
IPCP State: down
Authentication Failures:
Session Time: 0
Packets Sent:
Packets Received:
DSL Status
VPI: 0
VCI: 32
DSL Mode Setting: MMODE
DSL Negotiated Mode: NOT TRAINED
Connection Status: Idle
Speed (down/up): 0 / 0 Kbps
ATM QoS class: UBR
Near End CRC Errors (I/F): 0/0
Far End CRC Errors (I/F): 0/0
Near End CRC(Within last 30 mins) (I/F): 0/0
Far End CRC(Within last 30 mins) (I/F): 0/0
Near End RS FEC (I/F): 0/0
Far End RS FEC (I/F): 0/0
Near End FEC(Within last 30 mins) (I/F): 0/0
Far End FEC(Within last 30 mins) (I/F): 0/0
Discarded Packets(Within last 30 mins): 0
SNR Margin (Downstream/Upstream): 0/0
Attenuation (Downstream/Upstream): 0/0
Clear

Downloaded from www.Manualslib.com manuals search engine

Active User List

Selecting **Active User List** from the Status tab generates the "Active User List" screen. This screen displays a list of the users currently connected to the Modem accessing the Internet with NAT security activated.


Active User List
The list below displays active and idle users to whom the High Speed Internet DSL Modem is "talking" to. (Technically they are active and idle users on the local area network who have obtained an IP address from the modem's DHCP server.)
The following user information is displayed:
State = Active or Idle
MAC = MAC address of the computer (a MAC address is a unique # assigned by the manufacturer specifically for that computer)
IP = Computer's IP address for the local area network
PC Name= Computer Name
Connection Type = How the computer is connected to the network (Ethernet-USB)
State MAC IP PC Name Connection Type
Idle 00:50:fc:4d:90:e2 192.168.0.2 actiontec Ethernet

Downloaded from www.Manualslib.com manuals search engine

This page left intentionally blank.

Downloaded from www.Manualslib.com manuals search engine

Configuring Advanced Settings

6

This chapter contains information concerning the advanced configuration options (Advanced Setup) of the Modem, such as wireless settings, remote management, and Web site blocking.

Accessing Advanced Setup

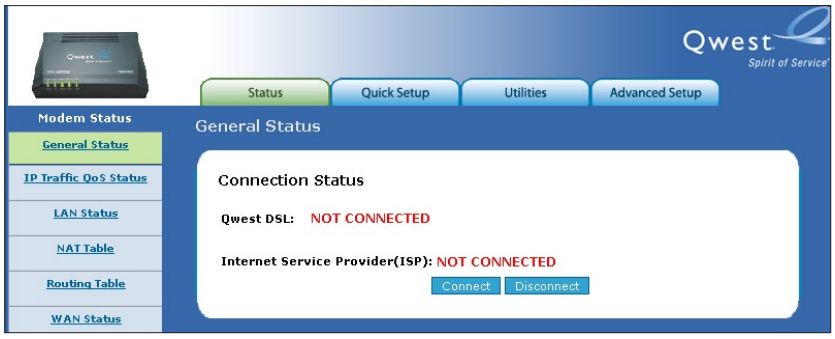
To access the Advanced Setup screens, follow these instructions:

1. Open the Web browser. In the address bar enter:

   `http://192.168.0.1`

   then press **Enter** on the keyboard.

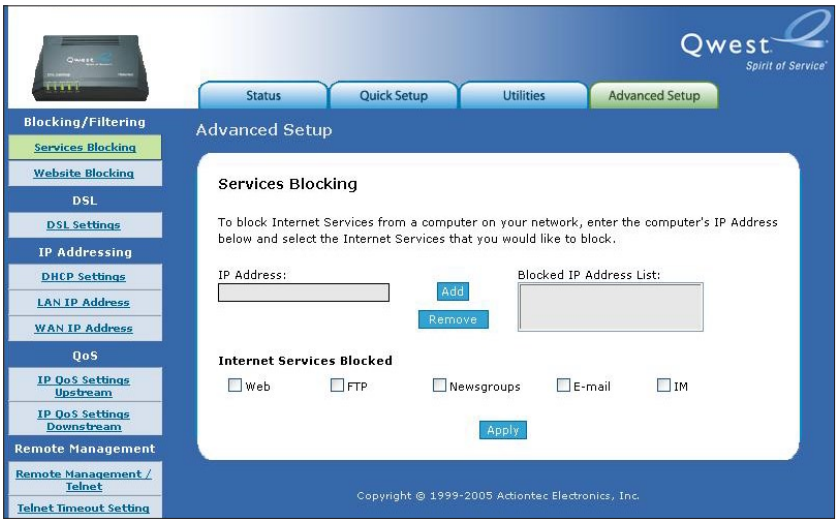
2. The Qwest Home screen appears, set to the "Status" tab. Select **Advanced Setup** from the row of tabs at the top.



☞ ***Note***: If the Qwest Home screen does not appear, make sure the Ethernet cable is properly connected to the Modem.

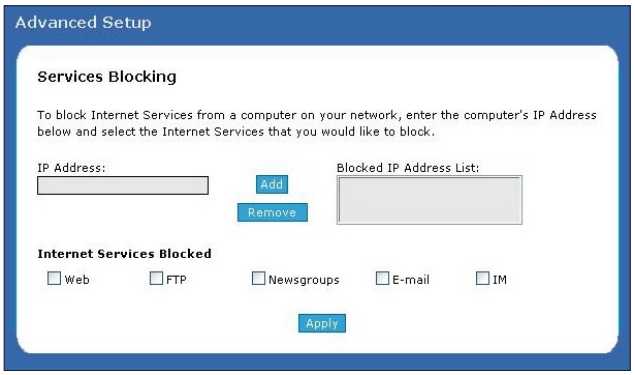
Downloaded from www.Manualslib.com manuals search engine

3. The "Advanced Setup" tap appears. From here, select a configuration option from the menu on the left side of the screen.



Services Blocking

Selecting **Services Blocking** in the Advanced Setup tab generates the "Services Blocking" screen.



To modify Internet privileges (Web, FTP, Newsgroups, etc.) for the computers on the network:

1. Enter the computer's IP address in the "IP Address" text box.

2. Select the Internet service(s) to be blocked.

3. Click **Add** to enter the computer's IP address in the "Blocked IP Address List" text box.

4. To remove blocked services, select the computer's IP address in the "Blocked IP Address List" text box and click **Remove**.

Downloaded from www.Manualslib.com manuals search engine

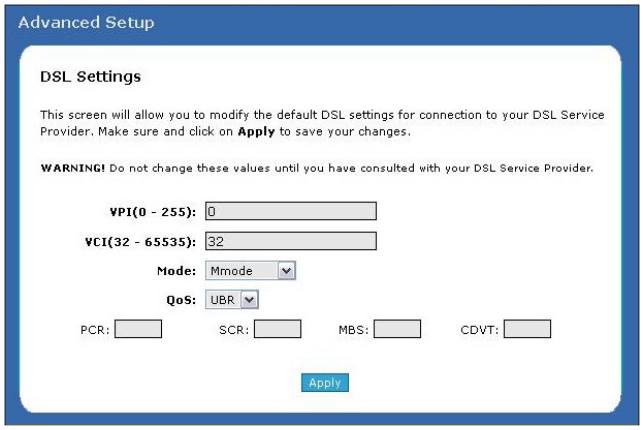
Website Blocking

Selecting **Website Blocking** in the Advanced Setup tab generates the "Website Blocking" screen. This feature enables the Modem to block Web sites to all computers on the network. To block a Web site, enter the address of the Web site in the "Website" text box and click **Add**. The blocked Web site address will be displayed in the "Blocked Website List" text box, and will not be available to computers on the network. To remove a blocked Web site, click on it in the "Blocked Website List," then click **Remove**.

Advanced Setup
Website Blocking
To block a specific website, please enter the website address, such as www.actiontec.com, in the space below. Then click the Add button to activate.
To remove a website from the Block Website List, please select the website address and click the Remove button.
Website:
Add
Remove
Blocked Website List:
Apply

DSL Settings

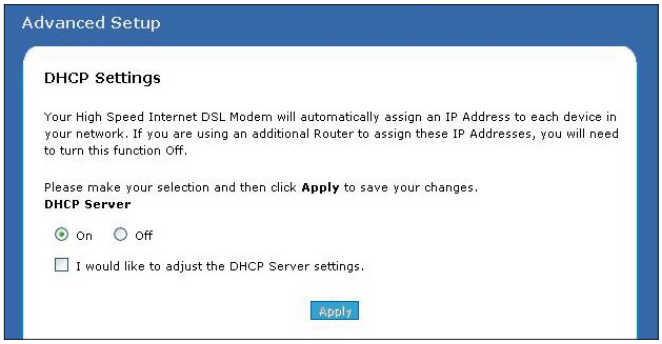
To access DSL Settings, select **DSL Settings** from the Advanced Setup tab. The Modem's VPI, VCI, Mode, and QoS (Quality of Service) settings can be changed from this screen. Actiontec recommends not changing these values without first consulting the ISP.


Advanced Setup
DSL Settings
This screen will allow you to modify the default DSL settings for connection to your DSL Service Provider. Make sure and click on Apply to save your changes.
WARNING! Do not change these values until you have consulted with your DSL Service Provider.
VPI(0 - 255): 0
VCI(32 - 65535): 32
Mode: Mmode
QoS: UBR
PCR:
SCR:
MBS:
CDVT:
Apply

Downloaded from www.Manualslib.com manuals search engine

DHCP Settings

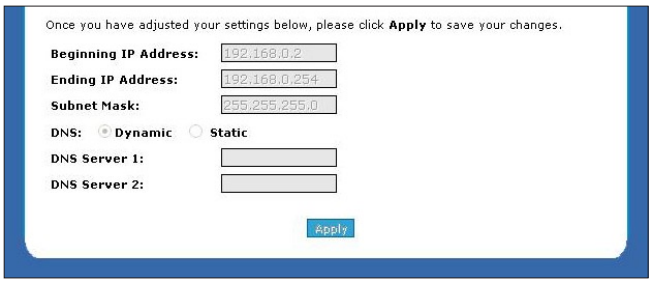
Selecting **DHCP Settings** in the Advanced Setup tab generates the "DHCP Settings" screen. The Modem has a built-in DHCP (Dynamic Host Configuration Protocol) server that automatically assigns a different IP address to each computer on the network, eliminating IP address conflicts.
The factory default setting is **On**. To disable the DHCP server, select **Off**.


Advanced Setup
DHCP Settings
Your High Speed Internet DSL Modem will automatically assign an IP Address to each device in your network. If you are using an additional Router to assign these IP Addresses, you will need to turn this function Off.
Please make your selection and then click Apply to save your changes.
DHCP Server
On
Off
I would like to adjust the DHCP Server settings.
Apply

Actiontec strongly recommends leaving the DHCP Server option **On**. If the DHCP Server option is **Off**, ensure the IP addresses of the networked computers are on the same subnet as the IP address of the Modem. For more information, see "DHCP Server Configuration."

DHCP Server Configuration

Clicking in the "I would like to adjust the DHCP Server settings" check box allows values to be entered in the text boxes in the lower part of the DHCP Settings screen. Change IP address range and DNS server information here.


Once you have adjusted your settings below, please click Apply to save your changes.
Beginning IP Address: 192.168.0.2
Ending IP Address: 192.168.0.254
Subnet Mask: 255.255.255.0
DNS: Dynamic Static
DNS Server 1:
DNS Server 2:
Apply

Downloaded from www.Manualslib.com manuals search engine

Beginning IP Address, Ending IP Address

These are the IP addresses at which the DHCP server starts and stops assigning IP addresses. Actiontec recommends keeping the factory default settings for these IP addresses (192.168.0.2 and 192.168.0.254, respectively).
The beginning and ending IP addresses define the IP address range of the Modem. If the default values are left intact, the Modem supplies a unique IP address between 192.168.0.2 and 192.168.0.254 to each computer on the network. Note that the first three groups of numbers of the addresses are identical; this means they are on the same subnet. The IP address of the Modem must be on the same subnet as the IP address range it generates. For instance, if the Modem's IP address is changed to 10.33.222.1, set the beginning IP address to 10.33.222.2, and the ending IP address to 10.33.222.254.

DNS (Dynamic or Static)

This is the type of DNS server provided by the ISP. If the ISP provided DNS server information, select the type here. If not, leave as is.

DNS Server 1

The primary DNS server provided by the ISP. If the ISP provided DNS server information, enter it here. If not, leave the text box intact.

DNS Server 2

The secondary DNS provided by the ISP. If the ISP provided secondary DNS server information, enter it here. If not, leave the text box intact.

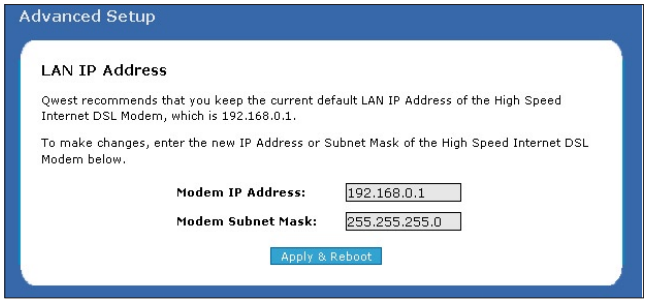
LAN IP Address

Selecting **LAN IP Address** in the Advanced Setup tab generates a"Warning" screen. After reading the on-screen information, click **Yes**.

Advanced Setup
LAN IP Address
WARNING!!
Any changes made to the LAN IP Address will reset some of the other settings on the modem.
Do not proceed without understanding the technical impacts of changing this feature.
Do you want to proceed?
Yes
No

Downloaded from www.Manualslib.com manuals search engine

The "LAN IP Address" screen appears.


Advanced Setup
LAN IP Address
Qwest recommends that you keep the current default LAN IP Address of the High Speed Internet DSL Modem, which is 192.168.0.1.
To make changes, enter the new IP Address or Subnet Mask of the High Speed Internet DSL Modem below.
Modem IP Address:
192.168.0.1
Modem Subnet Mask:
255.255.255.0
Apply & Reboot

The values in the "LAN IP Address" and "Netmask" text boxes are the IP address and subnet mask address of the Modem as seen on the network. These values can be modified for your LAN network, but Actiontec recommends keeping the default factory settings (IP address - 192.168.0.1; subnet mask - 255.255.255.0).

☞ ***Note***: If the Modem's LAN IP Address is modified, verify the DHCP Server range is within the same subnet. For more information, see "DHCP Server Configuration."

After changing settings, click **Apply & Reboot** reboot the Modem and make all changes permanent.

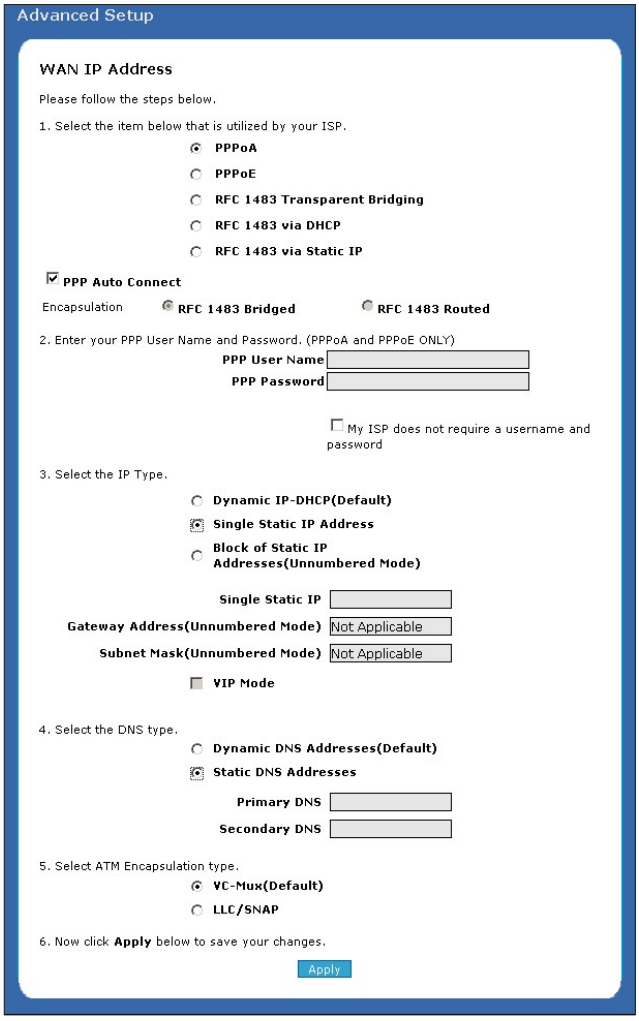
WAN IP Address

Selecting **WAN IP Address** in the Advanced Setup tab generates a "Warning" screen. After reading the on-screen information, click **Yes**.

Advanced Setup
WAN IP Address
WARNING!!
Any changes made to the WAN IP Address will reset some of the other settings on the modem. Do not proceed forward unless you have been instructed to do so by your ISP support personnel.
Do you want to proceed?
Yes
No

Downloaded from www.Manualslib.com manuals search engine

The "WAN IP Address" screen appears.



WAN IP Address allows manual set up of the IP address of the Modem. There are five ways to do this: **PPPoA**, **PPPoE**, **RFC 1483 Transparent Bridging**, **RFC 1483 via DHCP**, and **RFC 1483 via Static IP**.

☞ ***Note***: Some DSL providers use PPPoE/PPPoA to establish communication with an end user. If unsure about which connection is present, check with the ISP before continuing.

Downloaded from www.Manualslib.com manuals search engine

PPPoA/PPPoE

Select one of these options to allow the Modem to use the Point-to-Point over ATM (PPPoA) or Point-to-Point over Ethernet (PPPoE) protocol.
If a user name and password were entered during Basic Setup, they should be displayed in the "PPP User Name" and "PPP Password" text boxes, respectively. If not, enter the information now. If the information is unavailable, contact the ISP.

PPP Auto Connect

If "PPP auto connect" is activated (by clicking in the appropriate check box), the Modem will attempt to automatically redial the PPP connection if it is dropped or disconnected during an online session. PPP Auto Connect is turned **on** by default.

Encapsulation (PPPoA only)

Select one of the encapsulation options, based on information received from the ISP.

RFC 1483 Transparent Bridging

Select this option to use the Modem as a transparent bridge. This option should only be used if the Modem is being used solely as a modem to connect one computer to the Internet via a DSL connection. When the Modem is being used as a transparent bridge, it does not provide any firewall security.

RFC 1483 via DHCP

Select this option if the IP service is configured to use RFC 1483 Bridged or Routed (used for configurations without a static IP address assigned by an ISP). In this mode, the Modem will query the ISP to receive the IP address and routing information, which will terminate at the Modem, as opposed to the IP address and routing information being bridged to terminate at the computer. This allows the use of the router capabilities for the local area network (LAN).

Some ISPs need to authenticate end users with a host and/or domain name. If this is the case, check with the ISP for a host name and domain name and enter them in the "Host Name" and "Domain Name" text boxes, respectively. If the ISP does not require these settings, leave the text boxes blank.

☞ ***Note***: Contact the ISP if unsure of the proper configuration.

Downloaded from www.Manualslib.com manuals search engine

RFC 1483 via Static IP

Select this option if the ISP service is configured to use RFC 1483 using a static IP address, which causes the IP address and routing information to terminate at the Modem, as opposed to the IP address and routing information being bridged to terminate at the computer. This allows the use of the router capabilities for the Local Area Network (LAN). Enter the IP, subnet mask, and default gateway addresses provided by the ISP in the appropriate text boxes,.

☞ ***Note***: Contact the ISP if unsure of the proper configuration.

Encapsulation

If the Modem is configured to obtain an IP address through DHCP or to specify a static IP address, select the appropriate encapsulation option used by the ISP (**RFC 1483 Bridged** or **RFC 1483 Routed**).

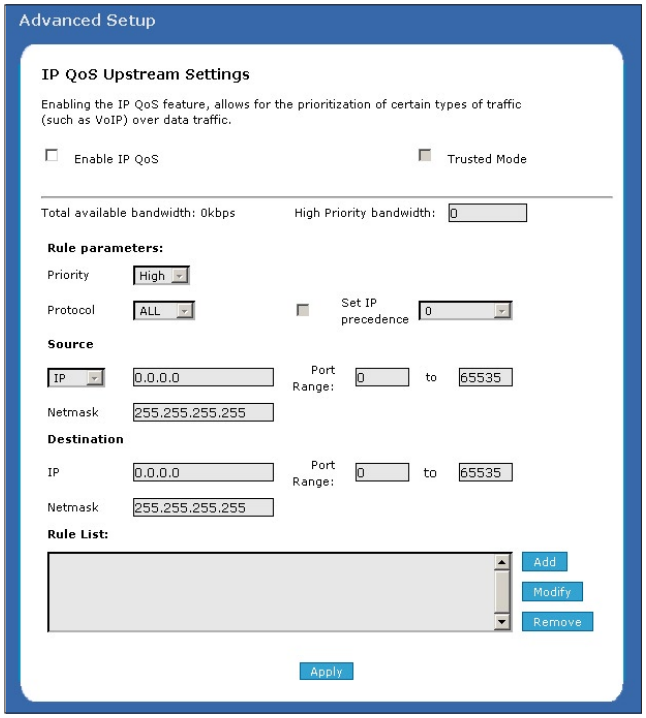
☞ ***Note***: Contact the ISP if unsure of the proper configuration.

For more information about setting up the Modem to use a static IP address, see chapter 4, "Setting Up Static IP Addresses," on page 15.

Downloaded from www.Manualslib.com manuals search engine

IP QoS Settings Upstream

Selecting **IP QoS Settings Upstream** from the "Advanced Setup" generates the "IP QoS Upstream Settings" screen.



QoS (Quality of Service) allows the prioritization of certain types of data traffic (such as VoIP traffic) over other types of traffic (such as standard data). Both upstream (data coming into the network) and downstream (data going out of the network) traffic can be prioritzed using QoS.

Enable QoS

Clicking in this check box activates/deactivates QoS.

Trusted Mode

If "Trusted Mode" is activated, all data traffic set to an IP precedence level of 5 will be recognized as high priority traffic, regardless of IP or MAC address rule settings (used for VoIP only).

Downloaded from www.Manualslib.com manuals search engine

Total Available Bandwidth

Displays the total amount of available bandwidth (in kilobits per second).

High Priority Bandwidth

Enter the amount of high priority bandwidth to be used by the prioritized traffic type (cannot exceed total available bandwidth).

Priority

Always set to "High" and cannot be changed.

Protocol

Select the data type being configured. Options: ALL, TCP, UDP, GRE, ICMP.

Set IP Precedence

Click in the check box, then select the precedence level (1-low through 7-high).

Source

Identify the source device here, using the device's IP or MAC address, then enter appropriate value in text box. If IP is used, enter the netmask address, if applicable. A priority port range can also be defined, using the "Port Range" text boxes.

Destination

Identify the destination device here, using the device's IP address, then enter appropriate value in text box. Enter the netmask address, if applicable. A priority port range can also be defined, using the "Port Range" text boxes.

Rule List

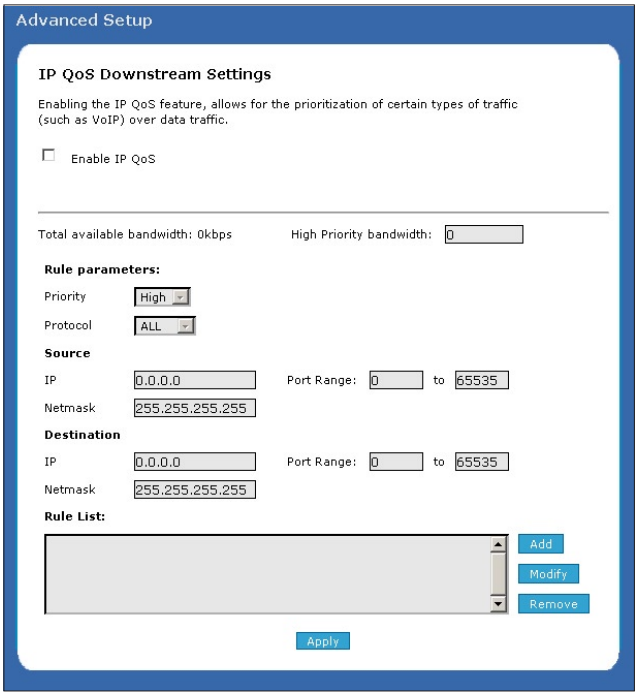
After finishing the configuration of the QoS settings, click **Add** to save the settings in the Rule List menu box. This collection of QoS settings can then be reused at a future time. If deleting a QoS rule list, highlight it, then click **Remove**.

When finished in this screen, click **Apply** to activate any changes made.

Downloaded from www.Manualslib.com manuals search engine

IP QoS Settings Downstream

Selecting **IP QoS Settings Downstream** from the "Advanced Setup" tab generates the "IP QoS Downstream Settings" screen.



The "IP QoS Downstream Settings" screen is identical to the "IP QoS Upstream Settings" screen, with the exception of the "Trusted Mode" option. Use this screen to configure QoS for data going out of the network.

When finished in this screen, click **Apply** to activate any changes made.

Downloaded from www.Manualslib.com manuals search engine

Remote Management/Telnet

Selecting **Remote Management** in the Advanced Setup tab generates the "Remote Management/Telnet" screen. Remote Management allows access to the Modem through the Internet via another computer. Actiontec recommends leaving the Remote Management and Remote Telnet **Off** (the factory default setting).

Advanced Setup
Remote Management/Telnet
The default Remote Management/Telnet settings are set to Off for security reasons. If you want to access your High Speed Internet DSL Modem remotely, please turn Remote Management On. In order to enable remote management an Admin User Name and Password must be set below.
Qwest does NOT recommend turning on Remote Telnet unless requested by authorized Qwest personnel.
1.
Admin User Name:
admin
Admin Password:
2.
Remote Management:
On
Off
Remote Telnet:
On
Off
Apply

To access the Modem from the Internet, activate Remote Management by entering the Admin User Name and Password in the appropriate text boxes, selecting **On** next to "Remote Management," and writing down the WAN IP address of the Modem (see "WAN IP Address"). On a computer outside of the network, open a Web browser and enter the Modem's WAN IP address in the address text box. The Modem's Home screen (or a password prompt, if a password has been set) appears in the browser window.

> ***Note***: Before Remote Management can be activated, the administrator password must be set. To do this, see "Changing the User Name and Password)" on page 15.

To access the Modem via Telnet, activate Remote Telnet by selecting **On** next to "Remote Telnet."

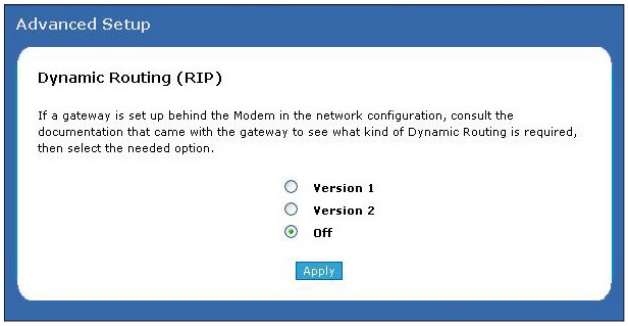
Telnet Timeout Setting

If Remote Telnet is activated in the Remote Management/Telnet screen, select **Telnet Timeout Settings** to generate the "Telnet Timeout Setting" screen. Here, select the amount of idle time before a Telnet session is automatically disconnected.

Downloaded from www.Manualslib.com manuals search engine

Dynamic Routing (RIP)

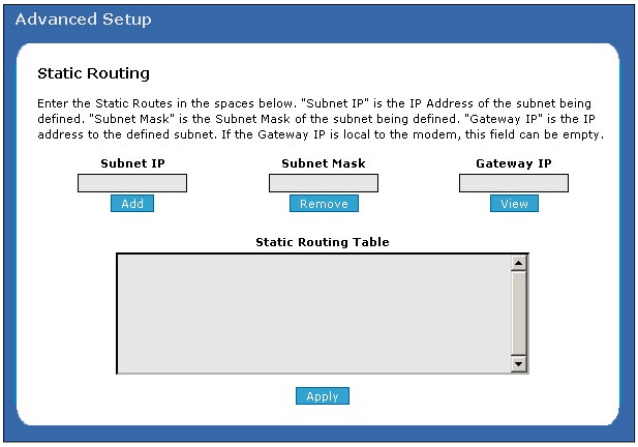
Selecting **Dynamic Routing (RIP)** in the Advanced Setup tab generates the "Dynamic Routing (RIP)" screen.


Advanced Setup
Dynamic Routing (RIP)
If a gateway is set up behind the Modem in the network configuration, consult the documentation that came with the gateway to see what kind of Dynamic Routing is required, then select the needed option.
Version 1
Version 2
Off
Apply

If a gateway is set up behind the Modem in the network configuration, consult the documentation that came with the gateway to see what kind of dynamic routing is required, then select the needed option.

Static Routing

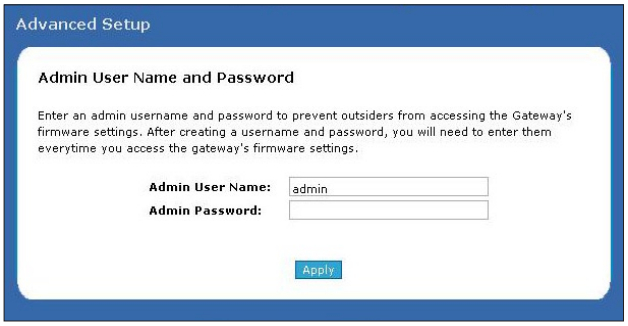
Selecting **Static Routing** in the Advanced Setup tab generates the "Static Routing" screen. Enter the addresses in their respective text boxes, then click **Add**. The address will appear in the "Static Routing Table." To remove an address, highlight it by clicking on it in the Static Routing Table, then click **Remove**.


Advanced Setup
Static Routing
Enter the Static Routes in the spaces below. "Subnet IP" is the IP Address of the subnet being defined. "Subnet Mask" is the Subnet Mask of the subnet being defined. "Gateway IP" is the IP address to the defined subnet. If the Gateway IP is local to the modem, this field can be empty.
Subnet IP
Subnet Mask
Gateway IP
Add
Remove
View
Static Routing Table
Apply

Downloaded from www.Manualslib.com manuals search engine

Admin User Name and Password

Selecting **Admin User Name and Password** in the Advanced Setup tab generates the "Admin User Name and Password" screen.

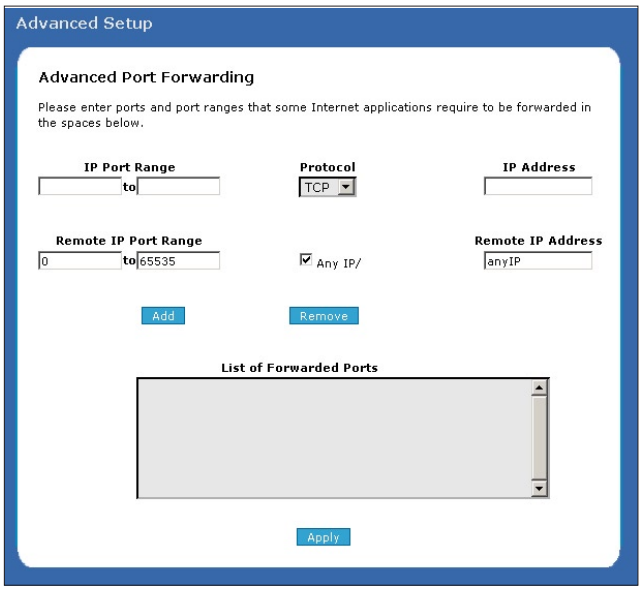

Advanced Setup
Admin User Name and Password
Enter an admin username and password to prevent outsiders from accessing the Gateway's firmware settings. After creating a username and password, you will need to enter them everytime you access the gateway's firmware settings.
Admin User Name:
admin
Admin Password:
Apply

To change the Modem's user name and password, enter a new user name (optional) in the "Admin User Name" text box, then a password in the "Admin Password" text box. Make sure to write the user name and password down and keep them in a secure location. They will be needed to access to the Modem's Graphical User Interface screens in the future. Click **Apply** to save the changes.

Downloaded from www.Manualslib.com manuals search engine

Advanced Port Forwarding

Selecting **Advanced Port Forwarding** in the Advanced Setup tab generates the "Advanced Port Forwarding" screen. Port forwarding allows certain programs to bypass the Modem's built-in firewall, allowing access to parts of the network (for hosting a Web or ftp server, for example). To use port forwarding, enter the IP port range in the "IP Port Range" text boxes. (If more than 10 ports are needed, *Action*tec recommends using DMZ Hosting. See "DMZ Hosting" on the next page for more information.) Choose the protocol type from the "Protocol" list box, then enter the IP address of the computer on the network to be used as a host. Click **Add**. The forwarded ports appear in the "List of Forwarded Ports" text box.
To remove forwarded ports, highlight them, then click **Remove**.

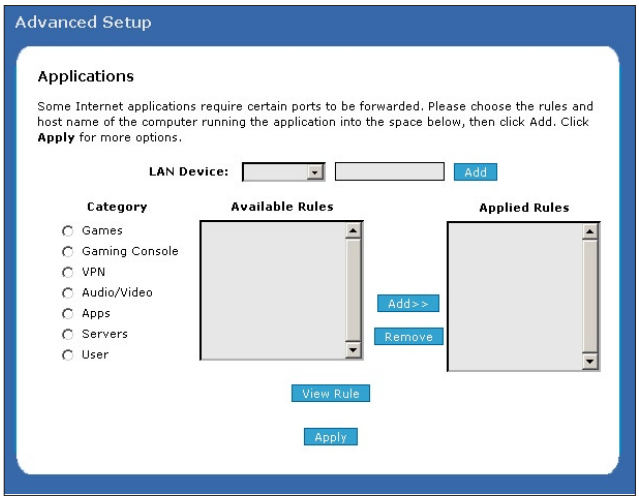


In this screen, the user can also allow only certain IP addresses to access forwarded ports. Enter the port range of the forwarded ports in the "Remote IP Port Range" text boxes, enter the IP address to be allowed access in the "Remote IP Address" text box, then click **Add**. The active forwarded ports will appear in the "List of Forwarded Ports" text box.
To deactivate a forwarded port, select it from the "List of Forwarded Ports" text box, then click **Remove**.

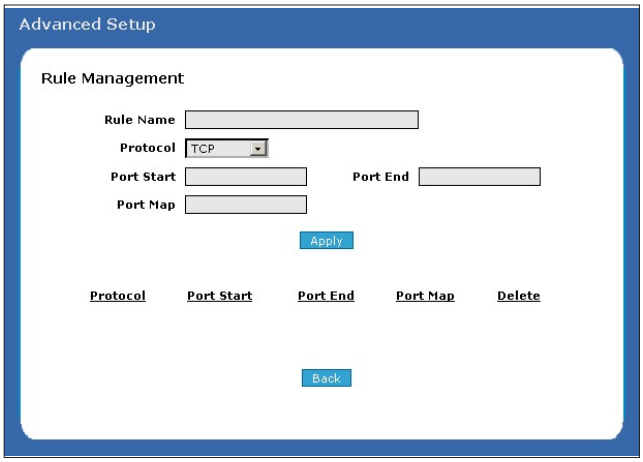
Downloaded from www.Manualslib.com manuals search engine

Applications

Selecting **Applications** in the Advanced Setup tab generates the "Applications" screen. To use, select the host name of a computer on the network from the "LAN Device" drop-down list (click the down arrow), then click **Add**. Next, select a "Category" by clicking the appropriate radio button. In the "Available Rules" list box, select a game, application, server, etc., then click **Add>>**. The selected item appears in the "Applied Rules" list box. Repeat for each item needed
To remove an item from the Applied Rules list, highlight it, then click **Remove**.
To view an item's rules (forwarded ports, etc.), highlight it, then click **View Rule.**



To create a custom set of rules, click the "User" radio button, then click **New**. The "Rule Management" screen appears.

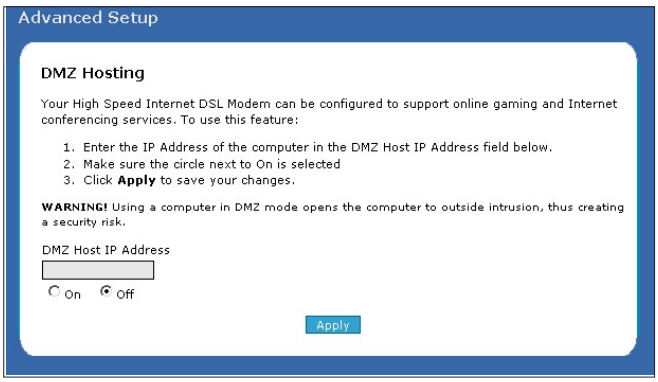


In this screen, the user can create a custom set of rules for a game or application not listed in the Applications screen. Enter the "Rule Name," "Protocol," "Port Start," "Port End," and "Port Map" in the appropriate text boxes, then click **Apply**. The rules are summarized at the bottom of the screen, and the rule set will appear in the Applications screen after clicking **Back**.

Downloaded from www.Manualslib.com manuals search engine

DMZ Hosting

Selecting **DMZ Hosting** in the Advanced Setup tab generates the "DMZ Hosting" screen. To use DMZ hosting, enter the IP address of the computer on the network to be used as a DMZ host in the "DMZ Host IP Address" text box, then click **On**.

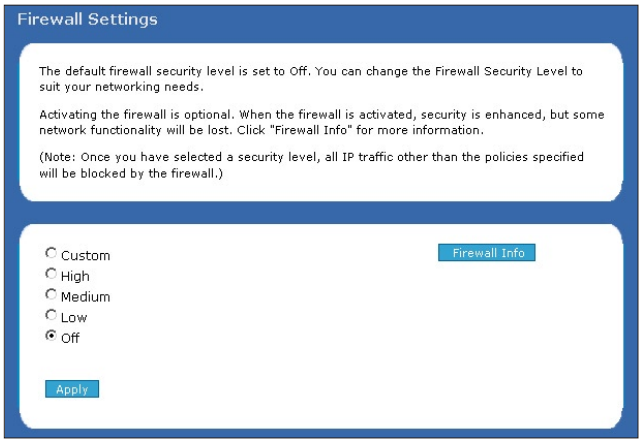

Advanced Setup
DMZ Hosting
Your High Speed Internet DSL Modem can be configured to support online gaming and Internet conferencing services. To use this feature:
1. Enter the IP Address of the computer in the DMZ Host IP Address field below.
2. Make sure the circle next to On is selected
3. Click Apply to save your changes.
WARNING! Using a computer in DMZ mode opens the computer to outside intrusion, thus creating a security risk.
DMZ Host IP Address
On
Off
Apply

DMZ hosting is used to support online gaming and Internet conferencing services. These programs usually require multiple open ports, making the network accessible from the Internet. DMZ hosting symbolically places the DMZ host computer outside of the Modem's network. Actiontec recommends activating DMZ hosting only as long as necessary.

Warning: The DMZ host computer will be vulnerable to computer hackers on the Internet while in DMZ mode.

Firewall

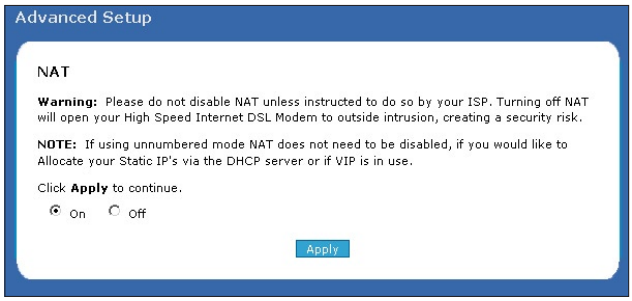
Selecting **Firewall** in the Advanced Setup tab generates the "Firewall Settings" screen. Select the level of security needed for the network. See Appendix F on page 87 for details concerning each level of security.


Firewall Settings
The default firewall security level is set to Off. You can change the Firewall Security Level to suit your networking needs.
Activating the firewall is optional. When the firewall is activated, security is enhanced, but some network functionality will be lost. Click "Firewall Info" for more information.
(Note: Once you have selected a security level, all IP traffic other than the policies specified will be blocked by the firewall.)
Custom
High
Medium
Low
Off
Firewall Info
Apply

Downloaded from www.Manualslib.com manuals search engine

NAT (Network Address Translation)

Selecting **NAT** in the Advanced Setup tab generates the "NAT" screen. The Modem's basic firewall security is based on NAT. Disabling NAT allows the computers connected to the Modem to be accessed by outside parties. Do not turn NAT off unless instructed to do so by the ISP.


Advanced Setup
NAT
Warning: Please do not disable NAT unless instructed to do so by your ISP. Turning off NAT will open your High Speed Internet DSL Modem to outside intrusion, creating a security risk.
NOTE: If using unnumbered mode NAT does not need to be disabled, if you would like to Allocate your Static IP's via the DHCP server or if VIP is in use.
Click Apply to continue.
On
Off
Apply

Downloaded from www.Manualslib.com manuals search engine

This page left intentionally blank.

Downloaded from www.Manualslib.com manuals search engine

Using the Modem's Utilities

7

The Modem's Graphical User Interface includes a collection of utilities to keep the Modem operating successfully, including **Reboot**, **Restore Default Settings**, **Upgrade Firmware**, and **Web Activity Log**.

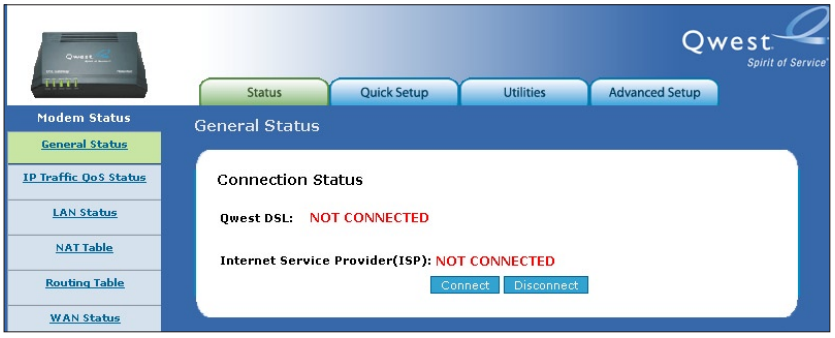
To access the Modem's Utilities:

1. Open the Web browser. In the "Address" text box type:

   `http://192.168.0.1`

   then press **Enter** on the keyboard.

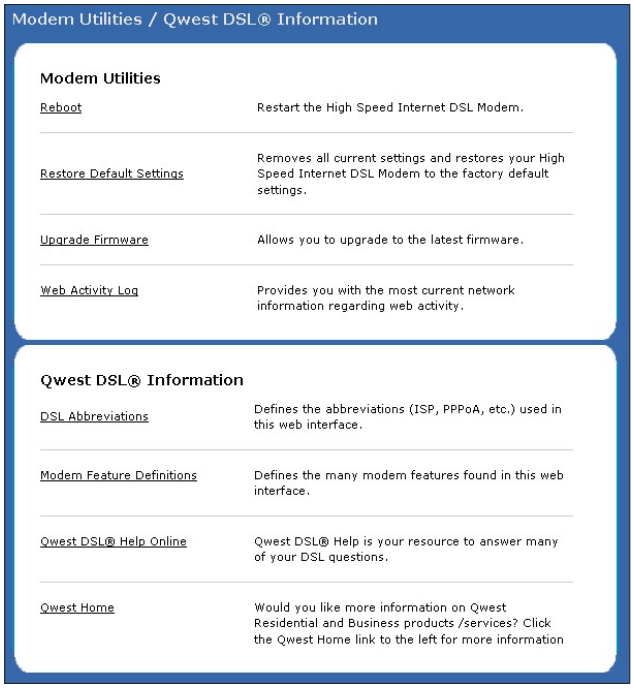
2. The Home screen appears, set to the "Status" tab. Select **Utilities** from the row of tabs at the top.



☞ ***Note***: If the Home screen does not appear, make sure the Ethernet cable is properly connected to the Modem.

Downloaded from www.Manualslib.com manuals search engine

3. The "Utilities" tab appears.


Modem Utilities / Qwest DSL® Information
Modem Utilities
Reboot
Restart the High Speed Internet DSL Modem.
Restore Default Settings
Removes all current settings and restores your High Speed Internet DSL Modem to the factory default settings.
Upgrade Firmware
Allows you to upgrade to the latest firmware.
Web Activity Log
Provides you with the most current network information regarding web activity.
Qwest DSL® Information
DSL Abbreviations
Defines the abbreviations (ISP, PPPoA, etc.) used in this web interface.
Modem Feature Definitions
Defines the many modem features found in this web interface.
Qwest DSL® Help Online
Qwest DSL® Help is your resource to answer many of your DSL questions.
Qwest Home
Would you like more information on Qwest Residential and Business products /services? Click the Qwest Home link to the left for more information

From this screen, select a Utilities option by clicking on its link.

Reboot

Selecting **Reboot** from the Utilities tab generates the "Reboot" screen.

Modem Utilities / Qwest DSL® Information
Reboot High Speed Internet DSL Modem
To reboot the High Speed Internet DSL Modem click on the "Reboot" button below.
Reboot

To reboot the Modem, click **Reboot**.

Downloaded from www.Manualslib.com manuals search engine

Restore Default Settings

To restore the Modem to its factory default settings, select **Restore Default Settings** from the Utilities tab. When the "Restore Default Settings" screen appears, click **Restore Default Settings**. Any changes made to the Modem's settings will be lost and the factory default settings restored. During this process, the Modem's Power light flashes and the Modem is disabled.

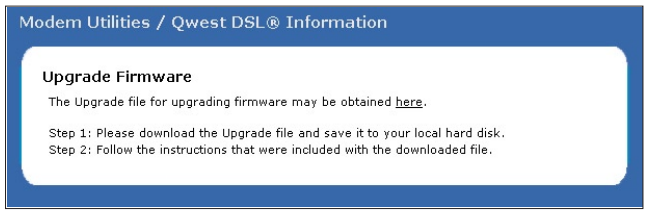
Modem Utilities / Qwest DSL® Information
Restore Default Settings
To restore the High Speed Internet DSL Modem to default settings click on the "Restore Default Settings" button below.
Restore Default Settings

Warning: Do not unplug the Power cord from the Modem during the Restore Default Settings process. Doing so may result in permanent damage to the Modem.

When the Power light stops flashing and glows steadily green, the Modem is fully operational, with its default settings reloaded.

Upgrade Firmware

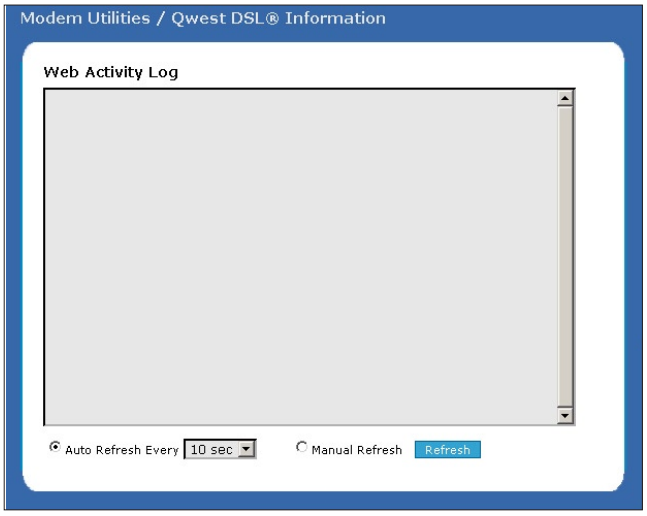
Selecting **Upgrade Firmware** in the Utilities tab generates the "Select Upgrade File" screen. Actiontec periodically posts firmware upgrades to enhance the Modem's capabilities. Follow the instructions on-screen to upgrade the Modem's firmware.


Modem Utilities / Qwest DSL® Information
Upgrade Firmware
The Upgrade file for upgrading firmware may be obtained here.
Step 1: Please download the Upgrade file and save it to your local hard disk.
Step 2: Follow the instructions that were included with the downloaded file.

Downloaded from www.Manualslib.com manuals search engine

Web Activity Log

The Web Activity Log provides information about the Web sites each computer on the Modem's network has visited. To access the "Web Activity Log" screen, select **Web Activity Log** from the Utilities tab.



Auto Refresh

To set the Web Activity Log to automatically refresh at certain intervals, click the radio button next to "Auto Refresh Every" at the bottom of the Web Activity Log screen, then enter a time value (in seconds) in the text box, or click on the down arrow and select a time value from the drop-down list. The Web Activity Log will refresh at the selected interval.

Manual Refresh

To set the Web Activity Log to manually refresh, click the radio button next to "Manual Refresh" at the bottom of the Web Activity Log screen. To refresh the Web Activity Log, click **Refresh**.

Downloaded from www.Manualslib.com manuals search engine

Troubleshooting 8

This chapter contains a list of problems that may be encountered while using the Modem, and techniques to try and overcome the problem. Note that these techniques may not solve the problem.

LAN Connection Failure

- Ensure the Modem is properly installed, the LAN connections are installed correctly, and the power is on.
- Confirm the computer and Modem are on the same network segment. If unsure, let the computer get the IP address automatically by initiating the DHCP function (see "DHCP Settings" on page 32), then verify the computer is using an IP address within the default range (192.168.1.2 through 198.168.1.254). If the computer is not using an IP address within the range, it will not connect to the Modem.
- Ensure the subnet mask address is set to 255.255.255.0 by clicking **Status** in the Modem GUI's Home screen.

Cannot Connect to the Internet

- Ensure both ends of the power cord and all network cables are properly connected.
- Ensure the subnet mask address is set to 255.255.255.0 by clicking **Status** in the Modem GUI's Home screen.
- Verify the Modem's settings are the same as the computer's by clicking **Status** in the Modem GUI's Home screen.
- If running Windows 98 SE or Me, check the computer's TCP/IP settings. Select **Start**, **Run**, enter

  `winipcfg`

  in the "Open" text box, then press **OK**. The "IP Configuration" window appears. Ensure the text box at the top of the window contains the name of the Ethernet adapter installed in the computer. If not, click on the down arrow next to the text box. When the list appears, click on the appropriate Ethernet adapter.
  In the fields below, the Ethernet adapter's various addresses appear.

Downloaded from www.Manualslib.com manuals search engine

There should be an entry for IP address, Subnet Mask, and Default Gateway. Additionally, the "IP Address" entry should be on the 192.168.0.X network (with "X" defining a range from 2 though 255).
If the Ethernet adapter is showing an incorrect IP address, click **Release**, which sets all values back to 0 (zero). Then, click **Renew** (this process may take a few seconds). The renewed IP address should be on the 192.168.0.X network.
If an error occurs, or the IP address renews with an address outside the 192.168.0.X network, contact the ISP immediately

- If running Windows 98 SE or Me, check the computer's TCP/IP settings. Select **Start**, **Run**, enter

  CMD

  in the "Open" text box, then press **OK**. A "DOS" window appears, with a blinking cursor (prompt). Enter

  ipconfig

  at the prompt, then press **Enter** on the keyboard.
  The IP address of the Ethernet adapter should appear in the DOS window. Ensure the IP address is on the 192.168.0.X network (with "X" defining a range from 2 though 255).
  If the Ethernet adapter is showing an incorrect IP address, enter

  ipconfig /release

  at the prompt (note the space before the forward slash), then press **Enter** on the keyboard, which sets all values back to 0 (zero). Next, enter

  ipconfig /renew

  at the prompt (note the space before the forward slash), then press **Enter** on the keyboard (this process may take a few seconds). The renewed IP address should be on the 192.168.0.X network.
  If an error occurs, or the IP address renews with an address outside the 192.168.0.X network, contact the ISP immediately.

- Ensure the browser is not set to "Never dial a connection" and there are no previous LAN settings.
  To check this, go to **Start**, **Settings**, **Control Panel**. In the Control Panel, double-click **Internet Options**. When the "Internet Properties" window appears, ensure the "Never dial a connection" option is not activated, then click **LAN Settings**. When the "Local Area Network (LAN) Settings" window appears, ensure no settings are activated. If there are settings activated, deactivate them.

- Shutdown and restart the computer. After the computer restarts, unplug the Power cord from the Modem and plug it back in. When the Power and Internet lights glow solid green, try accessing the Internet.

Downloaded from www.Manualslib.com manuals search engine

Time out error occurs when entering a URL or IP Address

- Verify all the computers are working properly.
- Ensure the IP settings are correct.
- Ensure the Modem is on and connected properly.
- Verify the Modem's settings are the same as the computer by clicking **Status** in the Modem GUI's Home screen.

Downloaded from www.Manualslib.com manuals search engine

This page left intentionally blank.

Downloaded from www.Manualslib.com manuals search engine

Reference

This appendix contains information about various topics, including accessing information about your Windows computer.

Locating Computer Information

The following procedure is valid for Windows 98 SE, Me, NT 4.0, 2000 and XP.

1. From the desktop, right-click on **My Computer**.
2. Select **Properties** from the menu that appears.
3. When the "System Properties" window appears, select **General**.
   The version of the operating system, processor type, and amount of RAM installed in the computer are listed here.
4. Close the System Properties window.
5. From the desktop, double-click on **My Computer**.
6. Right-click the icon representing your hard disk. For example: Local Disk (C:).
   Some computers have multiple hard disks.
7. From the menu that appears, select **Properties**.
8. When the window appears, select **General**.
9. The "Free space" value is the available space on the hard disk.
10. Close all windows.

Downloaded from www.Manualslib.com manuals search engine

Locating Windows Operating System Files

If the operating system files reside on the hard drive of the computer, follow the instructions below to locate them. If the files are not on the hard drive, they must be loaded from the installation disks.

Windows 98 SE

1. From the desktop, click **Start**.
2. When the menu appears, select **Find,** then **Files or Folders**.
3. When the "Find: All Files" window appears, select **Name & Location**.
4. In the "Named" text box, enter:
   ```
   *.cab
   ```
5. Click the **down arrow** next to the "Look In" text box and select **My Computer** from the list that appears.
6. Click **Find Now**.
7. When the search is complete, note the directory path that appears most often in the "In Folder" column. For example: C:\WINDOWS \SYSTEM.
8. The Windows operating system files are located in this directory. Write down the directory path for future reference.
9. Close the Find: All Files window.

Windows Me, 2000

1. From the desktop, click **Start**.
2. Select **Search**, then **For Files and Folders**.

3a. Windows Me: The "Search Results" window appears. In the "Search for files or folders named" text box, enter:

```
*.cab
```

3b. Windows 2000: The "Search Results" window appears. In the "Search for files or folders named" text box, enter:

```
i386
```


Downloaded from www.Manualslib.com manuals search engine

4. Click the **down arrow** next to the "Look in" text box and select **My Computer** from the list that appears.

5. Click **Search Now**.

6a. **Windows Me**: When the search is complete, note the directory path that appears most often in the "In Folder" column. For example: C:\WINDOWS \OPTIONS\INSTALL.

6b. **Windows 2000**: When the search is complete, note the directory path that appears most often in the "In Folder" column. For example: C:\WINNT \Driver Cache.

7. The Windows operating system files are located in this directory. Write down the directory path for future reference.

8. Close the Search Results window.

Windows NT 4.0

1. From the desktop, click **Start**.

2. When the menu appears, select **Find,** then **Files or Folders**.

3. When the "Find: All Files" window appears, select **Name & Location**.

4. In the "Named" text box, enter:

   `i386`

5. Click the **down arrow** next to the "Look In" text box and select **My Computer** from the list that appears.

6. Click **Find Now**.

7. When the search is complete, note the directory path that appears most often in the "In Folder" column. For example: C:\.

8. The Windows operating system files are located in this directory. Write down the directory path (followed by "i386") for future reference.

9. Close the Find: All Files window.

Downloaded from www.Manualslib.com manuals search engine

Windows XP

1. From the desktop, click **Start**.
2. Select **Search**, then **For Files and Folders**.
3. The "Search Results" window appears. In the panel at left titled "What do you want to search for?", click **All files and folders**.
4. Another panel, titled "Search by any or all of the criteria below" appears. In the "Look in" text box, click the **down arrow** and select **My Computer** from the menu that appears.
5. In the "All or part of the file name" text box, enter:

   ```
   i386
   ```

6. Click **Search**.
7. When the search is complete, note the directory path that appears most often in the "In Folder" column. For example: C:\WINDOWS \Driver Cache\.
8. The Windows operating system files are located in this directory. Write down the directory path (followed by "\i386") for future reference.
9. Close the Search Results window.

Downloaded from www.Manualslib.com manuals search engine

Setting up Static IP on a Computer

B

To communicate with the Modem from a computer on the network (to use the Modem's GUI, for example), the user may have to switch the IP address settings from DHCP-enabled to static IP, so that the computer and the Modem are on the same subnet.

To set up static IP on a computer, select the operating system and follow the instructions.

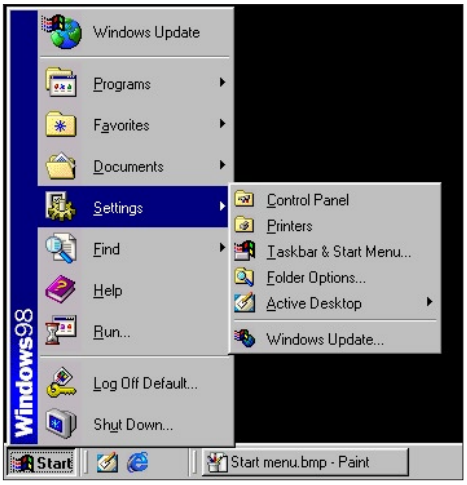
☞ ***Note***: The following procedures are based on the Modem's factory default IP address. If the Modem's IP address has been changed, enter the new IP address when instructed to enter an IP address.

Windows 98 SE

1. From the desktop, click on the **Start** button in the lower left corner.
2. From the menu that appears, select **Settings**.

Downloaded from www.Manualslib.com manuals search engine

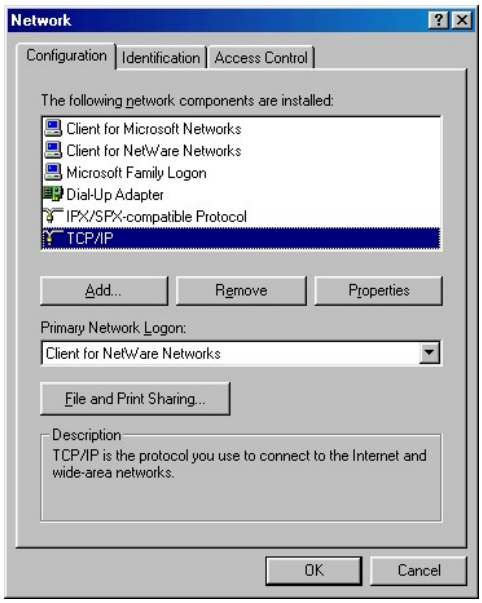
3. Another menu appears. Select **Control Panel**.



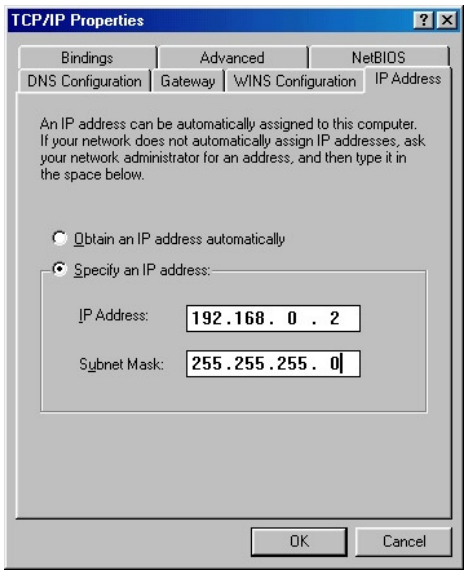
4. When the "Control Panel" window appears, double-click **Network**.

Downloaded from www.Manualslib.com manuals search engine

5. The "Network" window appears. In the "The following network components are installed" list box, locate and double-click **TCP/IP**.



6. The "TCP/IP Properties" window appears. Select **IP Address**.



7. In the "IP Address" tab, make sure the radio button next to "Specify an IP Address" is active (contains a black dot). If the radio button is already active, leave it alone.

8. Enter the following numbers in the "IP Address" text box:

`192.168.0.2`

Press the space bar on the keyboard to add the periods between the numbers.

Downloaded from www.Manualslib.com manuals search engine

9. Enter the following numbers in the "Subnet mask" text box:

```
255.255.255.0
```

Press the space bar on the keyboard to add the periods between the numbers.

10. Click **OK**. The TCP/IP Properties window disappears.

11. In the Network window, click **OK**. The Network window disappears.

12. The "System Settings Change" window appears, asking whether the computer should be restarted. Click **Yes**.

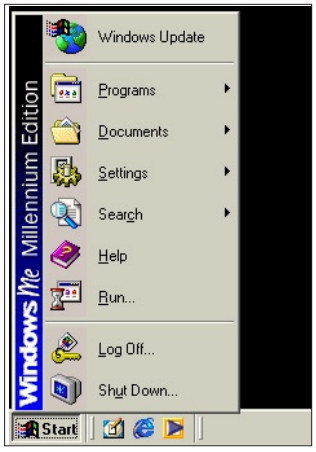
System Settings Change
You must restart your computer before the new settings will take effect.
Do you want to restart your computer now?
Yes
No

The computer restarts. It is now set up with a static IP address, allowing the user to access the Modem's GUI.

Windows Me

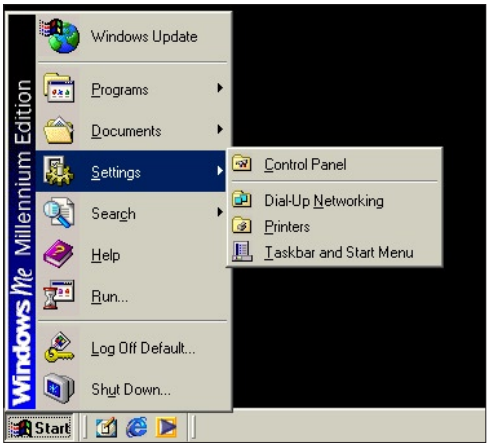
1. From the desktop, click on the **Start** button in the lower left corner.

2. From the menu that appears, select **Settings**.



Downloaded from www.Manualslib.com manuals search engine

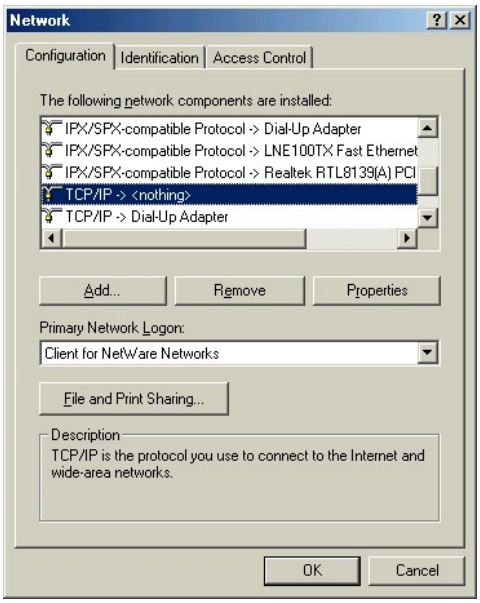
3. Another menu appears. Select **Control Panel**.



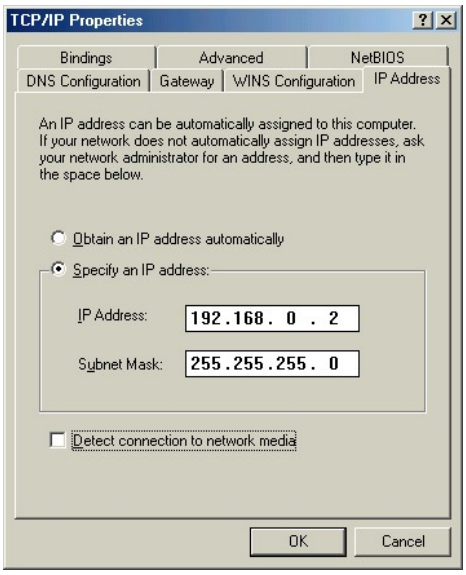
4. When the "Control Panel" window appears, double-click **Network**.

Downloaded from www.Manualslib.com manuals search engine

5. The "Network" window appears. In the "The following network components are installed" list box, locate and double-click **TCP/IP**.



6. The "TCP/IP Properties" window appears. Click **IP Address**.


TCP/IP Properties
Bindings
Advanced
NetBIOS
DNS Configuration
Gateway
WINS Configuration
IP Address
An IP address can be automatically assigned to this computer. If your network does not automatically assign IP addresses, ask your network administrator for an address, and then type it in the space below.
Obtain an IP address automatically
Specify an IP address:
IP Address:
192.168. 0 . 2
Subnet Mask:
255.255.255. 0
Detect connection to network media
OK
Cancel

7. In the "IP Address" tab, make sure the radio button next to "Specify an IP Address" is active (contains a black dot). If the radio button is already active, leave it alone.

8. Enter the following numbers in the "IP Address" text box:

`192.168.0.2`

Do not include the periods; they are automatically entered.

Downloaded from www.Manualslib.com manuals search engine

9. Enter the following numbers in the "Subnet mask" text box:

   `255.255.255.0`

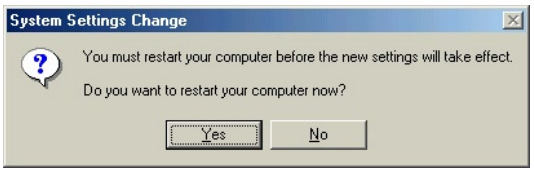
   Do not include the periods; they are automatically entered.

10. Click **OK**. The TCP/IP Properties window disappears.

11. If there is a check in the box next to "Detect connection to network media," click on it to uncheck the box.

12. In the Network window, click **OK**. The Network window disappears.

13. The "System Settings Change" window appears, asking whether the computer should be restarted. Click **Yes**.


System Settings Change
You must restart your computer before the new settings will take effect.
Do you want to restart your computer now?
Yes
No

The computer restarts. It is now set up with a static IP address, allowing the user to access the Modem's GUI.

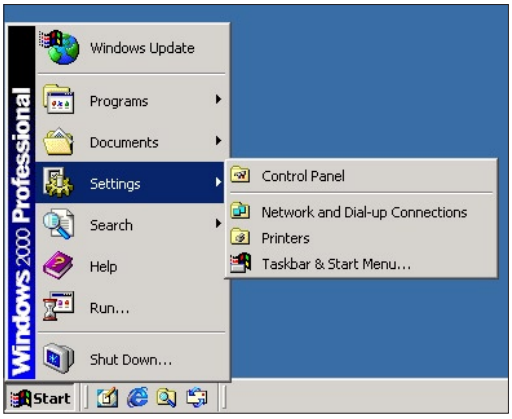
Windows 2000

1. From the desktop, click on the **Start** button in the lower left corner.

2. From the menu that appears, select **Settings**.

Downloaded from www.Manualslib.com manuals search engine

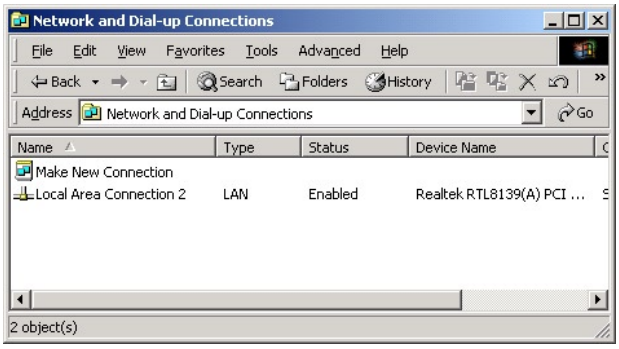
3. Another menu appears. Select **Control Panel**.



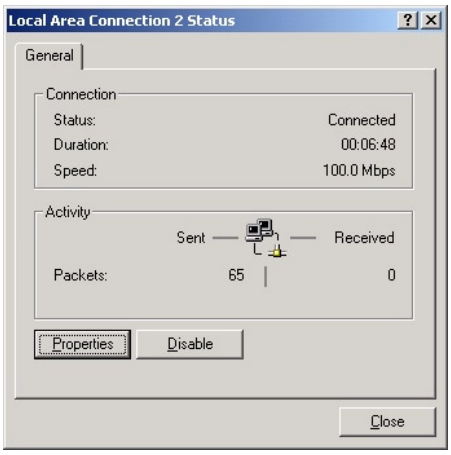
4. When the "Control Panel" window appears, double-click **Network and Dial-up Connections**.

Downloaded from www.Manualslib.com manuals search engine

5. In the "Network and Dial-up Connections" window, double-click **Local Area Connection**. A number may be displayed after the Local Area Connection. If there is more than one Local Area Connection listed, locate the one that corresponds to the network card installed in the computer by finding the name of the network card in the "Device Name" column.


Network and Dial-up Connections
File Edit View Favorites Tools Advanced Help
Back Search Folders History
Address Network and Dial-up Connections
Go
Name Type Status Device Name
Make New Connection
Local Area Connection 2 LAN Enabled Realtek RTL8139(A) PCI ...
2 object(s)

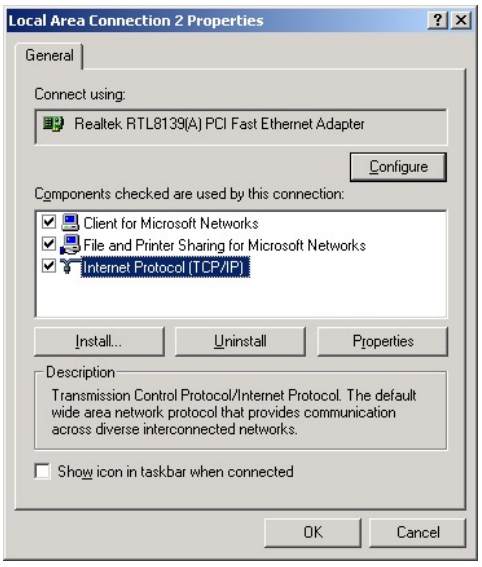
6. The "Local Area Connection Status" window appears. Select **General**, then click **Properties**.



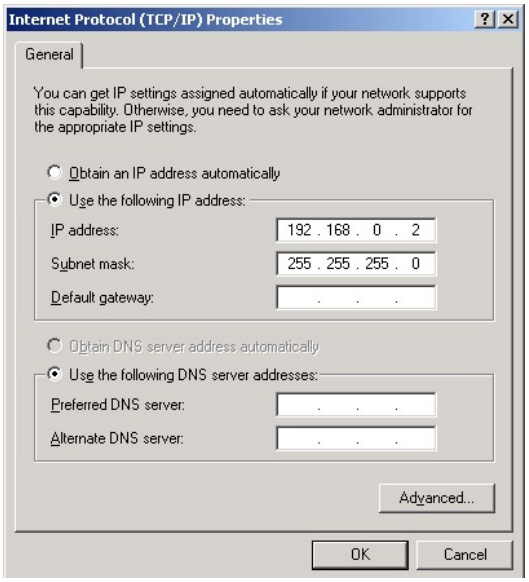
Downloaded from www.Manualslib.com manuals search engine

7. The "Local Area Connection Properties" window appears. Click **General**.

8. In the "Components checked are used by this connection" list box, double-click **Internet Protocol (TCP/IP)**.



9. The "Internet Protocol (TCP/IP) Properties" window appears.


Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
192 . 168 . 0 . 2
Subnet mask:
255 . 255 . 255 . 0
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

10. In the **General** tab, make sure the radio button next to "Obtain an IP Address automatically" is active (contains a black dot). If the radio button is already active, leave it alone.

11. Enter the following numbers in the "IP Address" text box:

`192.168.0.2`

Press the space bar on the keyboard to add the periods between the numbers.

Downloaded from www.Manualslib.com manuals search engine

12. Enter the following numbers in the "Subnet mask" text box:

`255.255.255.0`

Press the space bar on the keyboard to add the periods between the numbers.

13. Click **OK**. The "Internet Protocol (TCP/IP) Properties" window disappears.

14 In the "Local Area Connection Properties" window, click **OK**. The Local Area Connection Properties window disappears.

15. Click **Close** in the Local Area Connection Status window. The window disappears.

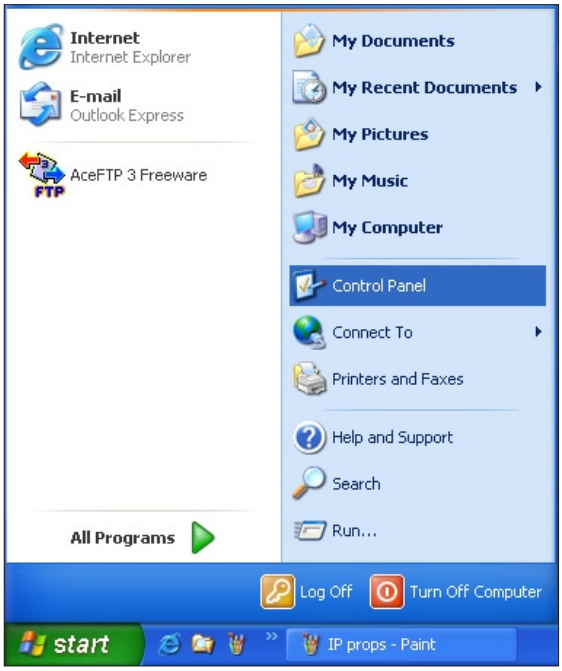
16. Close the Network and Dial-up Connections window by clicking on the "**x**" button at the upper right corner of the window.

The computer is now set up with a static IP address, allowing the user to access the Modem's GUI.

Windows XP

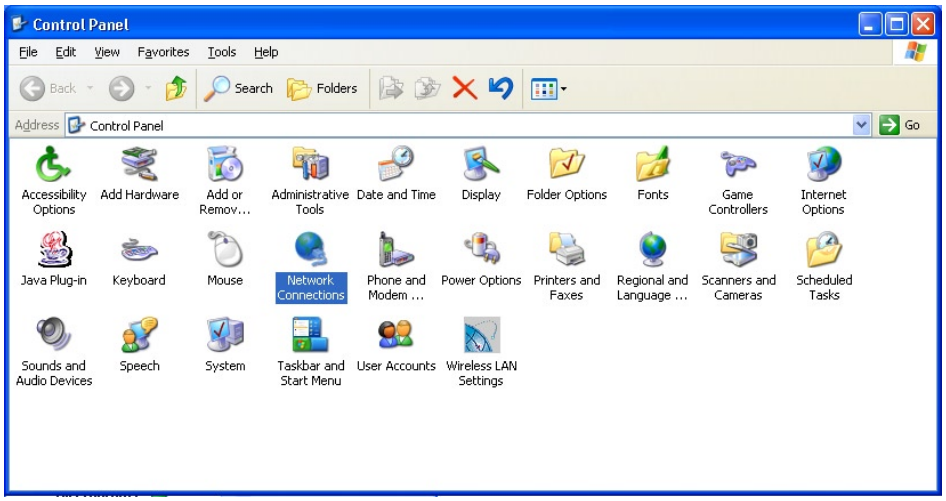
1. From the desktop, click **Start** button in the lower left corner.

2. From the menu that appears, select **Control Panel**.

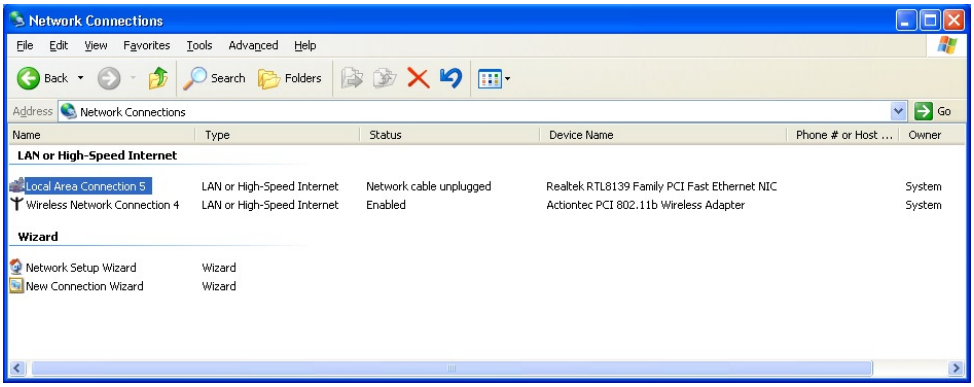


Downloaded from www.Manualslib.com manuals search engine

3. When the "Control Panel" window appears, double-click **Network Connections**.



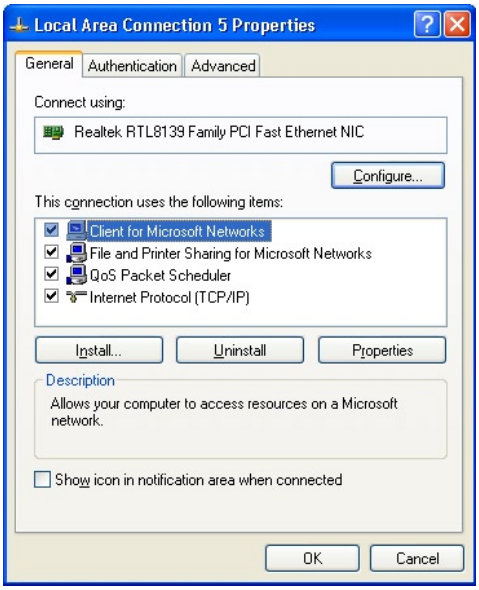
4. In the "Network Connections" window, double-click **Local Area Connection**. A number may be displayed after the Local Area Connection. If more than one Local Area Connection is listed, locate the one that corresponds to the network card installed in your computer by finding the name of the network card in the "Device Name" column.


Network Connections
File Edit View Favorites Tools Advanced Help
Back Search Folders
Address Network Connections
Go
Name Type Status Device Name Phone # or Host ... Owner
LAN or High-Speed Internet
Local Area Connection 5 LAN or High-Speed Internet Network cable unplugged Realtek RTL8139 Family PCI Fast Ethernet NIC System
Wireless Network Connection 4 LAN or High-Speed Internet Enabled Actiontec PCI 802.11b Wireless Adapter System
Wizard
Network Setup Wizard Wizard
New Connection Wizard Wizard

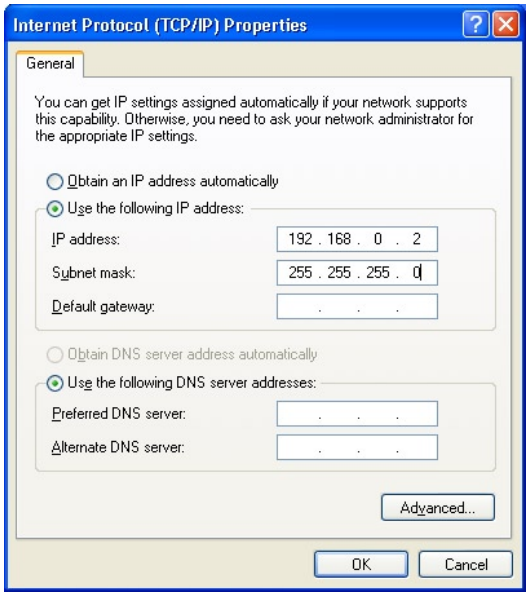
Downloaded from www.Manualslib.com manuals search engine

5. The "Local Area Connection Properties" window appears. Select **General**.

6. In the "This connection uses the following items" list box, double-click **Internet Protocol** (TCP/IP).



7. The "Internet Protocol (TCP/IP) Properties" window appears.


Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
192 . 168 . 0 . 2
Subnet mask:
255 . 255 . 255 . 0
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

8. In the **General** tab, make sure the radio button next to "Use the following IP Address" is active (contains a black dot). If the radio button is already active, leave it alone.

Downloaded from www.Manualslib.com manuals search engine

9. Enter the following address in the "IP Address" text box:

   `192.168.0.2`

   Enter the periods in the address by pressing the space bar on the keyboard.

10. Enter the following address in the "Subnet mask" text box:

    `255.255.255.0`

    Enter the periods in the address by pressing the space bar on the keyboard.

11. Click **OK**. The Internet Protocol (TCP/IP) Properties window disappears.

12 In the Local Area Connection Properties window, click **Close**. The Local Area Connection Properties window disappears.

13. Click **Close** in the Local Area Connection Status window. The window disappears.

14. Close the Network and Dial-up Connections window by clicking on the "**x**" button at the upper right corner of the window.

The computer is now set up with a static IP address, allowing the user to access the Modem's GUI.

Downloaded from www.Manualslib.com manuals search engine

Computer Security

The Internet is a giant network of computers located all over the world. When a computer is connected to the Internet, it can exchange information with any other computer on the Internet. This allows a computer user to send E-mail, surf the World Wide Web, download files, and buy products and services online, but it also makes the computer vulnerable to attack from persons intent on doing malicious mischief, or worse. Unless access to the computer is controlled, someone on the Internet can access the information on the computer and damage or destroy that information.

Actiontec recommends securing your computer from unwanted intrusion. Security is ultimately the end user's responsibility. Please secure your computer, and don't be a victim.

Comparing DSL Service with a Dial-Up Modem

With a dial-up modem, a computer user makes an Internet connection by dialing a telephone number, surfs the Internet for a period of time, and then disconnects the dial-up modem. No one on the Internet can access a computer that is not connected to the Internet.

Unlike a dial-up modem, DSL service is "always connected." The connection is always available – there is no need to dial a phone number to access the Internet. The computer can be connected to the Internet all the time.

With both types of Internet connections, access to the computer must be controlled to make sure someone on the Internet doesn't access the information on the computer. The longer the computer is connected to the Internet, the easier it is for someone on the Internet to find the computer and attempt to access it without permission. DSL service also provides fast Internet connections. This not only improves Internet performance, it also improves Internet performance for anyone attempting to access the computer.

Downloaded from www.Manualslib.com manuals search engine

Modem Security

If connecting to the ISP through Point-to-Point Protocol (PPP), be sure to provide the Modem with an administrative password. If a password is not set, someone on the Internet can access the Modem and change its configuration or steal your PPP login name and password. For instructions on setting the password, see the "Changing the User Name and Password" on page 15.

If connecting to the ISP through bridging mode, the Modem should be safe from unwarranted and illegal intrusion.

Computer Security

To protect the valuable information on the computer, review the following topics. These topics cover software programs and operating system features affecting the security of the computer's data.

Anti-Virus Programs

The computer should have an anti-virus program, and the virus definitions should be updated on a regular basis – at least once a month.

E-mail Attachments

Never run a program received as an attachment to an e-mail message unless the program is known to be safe. A program from an unknown source can delete all the files on the computer's hard disk or install a "backdoor" software application that lets people on the Internet gain access to the computer without permission.

Web Browsers

Always exit the Web browser (Internet Explorer, Firefox, or Netscape Navigator, for example). Never "minimize" the browser or leave it open in the background. Breaking into a computer is easier when a Web browser is running.

Downloaded from www.Manualslib.com manuals search engine

Network Applications

Network applications (such as software programs) that allow remote access to the computer also make the computer vulnerable to access by other people on the Internet. If using a network application that allows remote access, consider installing a firewall.

Electronic Security

The following are two methods to secure your computer electronically.

Network Address Translation

If a local area network and a PPP connection to the ISP using dynamic IP addresses through a DHCP server are being used, Network Address Translation (NAT) is being used. NAT provides a very basic level of security.

Firewalls

The safest way to prevent attacks on the computer is through a firewall – a hardware device or software program that protects the computer from unauthorized access by controlling who can access your computer and monitoring the transmissions between the computer and the Internet

Windows XP has a built-in firewall. For more information, select **Help and Support Center** from the Help menu. Search for **Internet Connection Firewall**.

If Windows 98 SE, Me, NT 4.0, or 2000 is running on the computer, consider installing a firewall. Hardware and software firewall products are changing rapidly as more homes and businesses establish high-speed digital connections between their local area networks and the Internet.

Downloaded from www.Manualslib.com manuals search engine

This page left intentionally blank.

Downloaded from www.Manualslib.com manuals search engine

Specifications

D

General

Model Number

GT701R (USB/Ethernet DSL Modem)

Standards

IEEE 802.3 (10BaseT)
IEEE 802.3u (100BaseTX)
G.dmt
G.lite
t1.413
RFC 1483, 2364, 2516

Protocol

LAN - CSMA/CD
WAN - PPP, DHCP, Static IP

WAN

Full-rate ADSL Interface

LAN

10/100 RJ-45 switched port
USB port

Speed

LAN Ethernet: 10/100Mbps auto-sensing

Cabling Type

Ethernet 10BaseT: UTP/STP Category 3 or 5
Ethernet100BaseTX: UTP/STP Category 5
USB

Downloaded from www.Manualslib.com manuals search engine

LED Indicators

Power, DSL, Internet, Ethernet, USB

Environmental

Power

External, 12V DC, 600mA

Certifications

FCC Class B, FCC Class C (part 15, 68), CE Mark Commercial, UL

Operating Temperature

0º C to 40º C (32ºF to 104ºF)

Storage Temperature

-20ºC to 70ºC (-4ºF to 158ºF)

Operating Humidity

10% to 85% non-condensing

Storage Humidity

5% to 90% non-condensing

Note: Specifications are subject to change without notice.

Downloaded from www.Manualslib.com manuals search engine

Glossary

Access Point

A device that allows wireless clients to connect to one another. An access point can also act as a bridge between wireless clients and a "wired" network, such as an Ethernet network. Wireless clients can be moved anywhere within the coverage area of the access point and remain connected to the network. If connected to an Ethernet network, the access point monitors Ethernet traffic and forwards appropriate Ethernet messages to the wireless network, while also monitoring wireless traffic and forwarding wireless client messages to the Ethernet network.

ATM (Asynchronous Transfer Mode)

A networking technology based on transferring data in fixed-size packets

Client

A desktop or mobile computer connected to a network.

DHCP (Dynamic Host Configuration Protocol)

A protocol designed to automatically assign an IP address to every computer on your network.

DNS (Domain Name System) Server Address

Allows Internet host computers to have a domain name and one or more IP addresses. A DNS server keeps a database of host computers and their respective domain names and IP addresses so that when a user enters a domain name into a Web browser, the user is sent to the proper IP address. The DNS server address used by computers on the home network corresponds to the location of the DNS server the ISP has assigned.

DSL (Digital Subscriber Line) Modem

A modem that uses existing phone lines to transmit data at high speeds.

Encryption

A method to allow wireless data transmissions a level of security.

ESSID (Extended Service Set Identifier)

A unique identifier for a wireless network. Also known as "SSID."

Downloaded from www.Manualslib.com manuals search engine

Ethernet Network

A standard wired networking configuration using cables and hubs.

Firewall

A method preventing users outside the network from accessing and/or damaging files or computers on the network.

Gateway

A central device that manages the data traffic of your network, as well as data traffic to and from the Internet.

IP (Internet Protocol) Address

A series of four numbers separated by periods identifying a unique Internet computer host.

ISP Gateway Address

An IP address for the Internet router. This address is only required when using a cable or DSL modem.

ISP (Internet Service Provider)

A business that allows individuals or businesses to connect to the Internet.

LAN (Local Area Network)

A group of computers and devices connected together in a relatively small area (such as a house or an office). A home network is considered a LAN.

MAC (Media Access Control) Address

The hardware address of a device connected to a network.

NAT (Network Address Translation)

A method allowing all of the computers on a home network to use one IP address, enabling access to the Internet from any computer on the home network without having to purchase more IP addresses from the ISP.

PC Card

An adapter that inserts in the PCMCIA slot of a computer, enabling the communication with a device.

Downloaded from www.Manualslib.com manuals search engine

PPPoE (Point-To-Point Protocol over Ethernet)/ PPPoA (Point-To-Point Protocol over ATM)

Methods of secure data transmission.

Router

A central device that manages the data traffic of your network.

Subnet Mask

A set of four numbers configured like an IP address used to create IP address numbers used only within a particular network.

SSID

See "ESSID."

TCP/IP (Transmission Control Protocol/Internet Protocol)

The standard protocol for data transmission over the Internet.

WAN (Wide Area Network)

A network that connects computers located in separate areas, (i.e., different buildings, cities, countries). The Internet is a WAN.

WECA (Wireless Ethernet Compatibility Alliance)

An industry group that certifies cross-vender interoperability and compatibility of IEEE 802.11b wireless networking products and promotes the standard for enterprise, small business, and home environments.

WLAN (Wireless Local Area Network)

A group of computers and other devices connected wirelessly in a small area.

Downloaded from www.Manualslib.com manuals search engine

This page left intentionally blank.

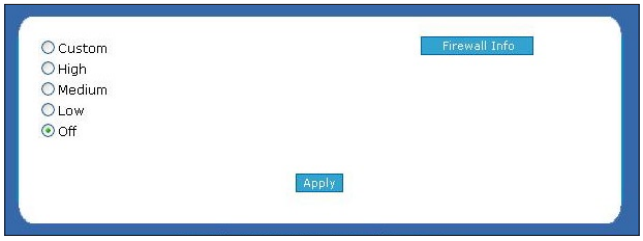
Downloaded from www.Manualslib.com manuals search engine

Firewall Security Levels

The following information is related to the Firewall section of the "Configuring Advanced Settings" chapter (see page 48). The Firewall options include **Off**, **Low**, **Medium**, **High**, and **Custom**.

Off (No Firewall Security)

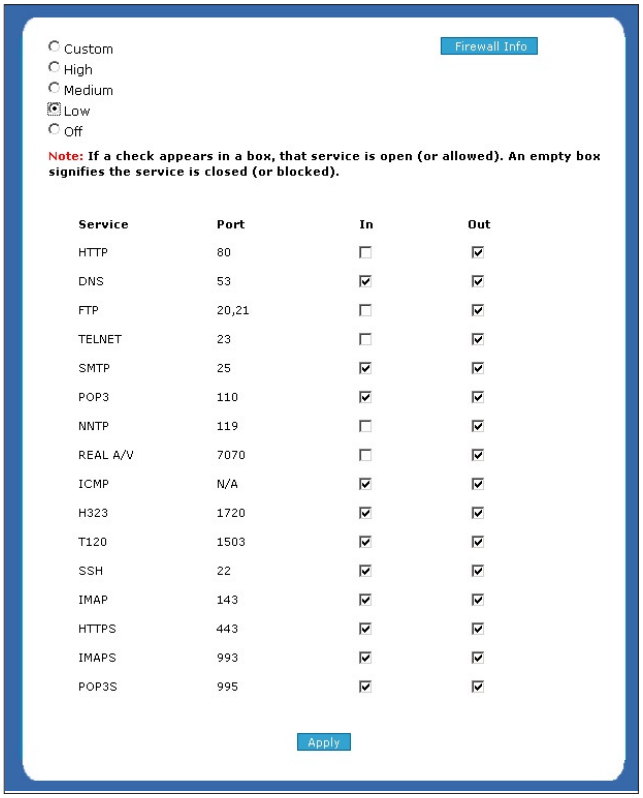
To turn firewall security off on the Modem, click in the "Off" radio button in the Firewall screen. At this setting, all services and their respective ports are open.



Downloaded from www.Manualslib.com manuals search engine

Low Security Level

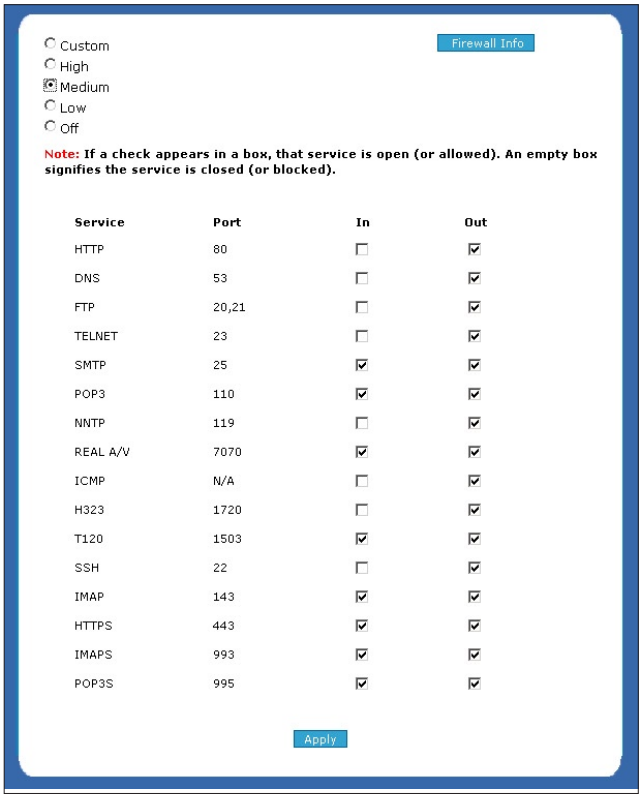
Apply the lowest firewall security setting by selecting "Low" in the Firewall screen. Services and their respective ports are open if a check appears in the appropriate check box, or closed if no check appears. If the service and/or port does not appear in the screen, it is open. This setting can be modified by clicking in check boxes to open or close particular services/ports.



Downloaded from www.Manualslib.com manuals search engine

Medium Security Level

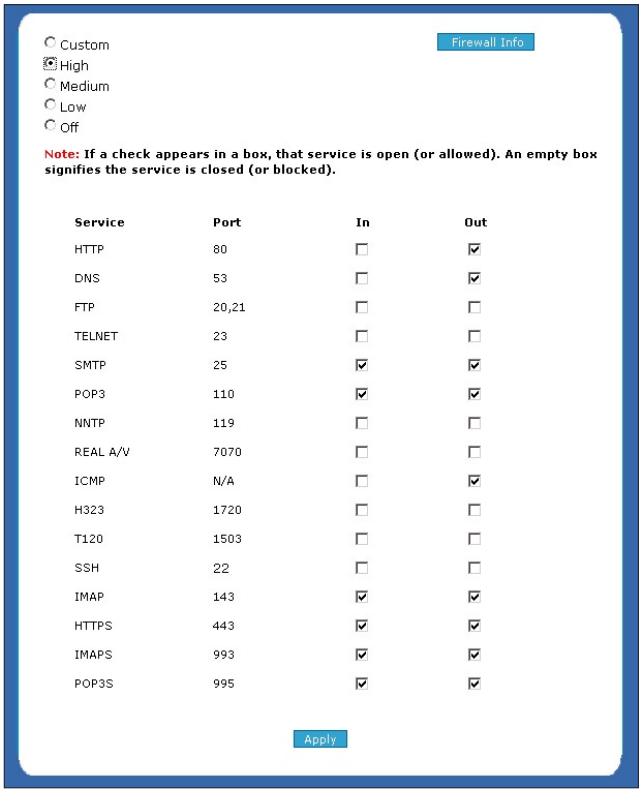
Apply a medium firewall security setting by selecting "Medium" in the Firewall screen. Services and their respective ports are open if a check appears in the appropriate check box, or closed if no check appears. If the service and/or port does not appear in the screen, it is open. This setting can be modified by clicking in check boxes to open or close particular services/ports.



Downloaded from www.Manualslib.com manuals search engine

High Security Level

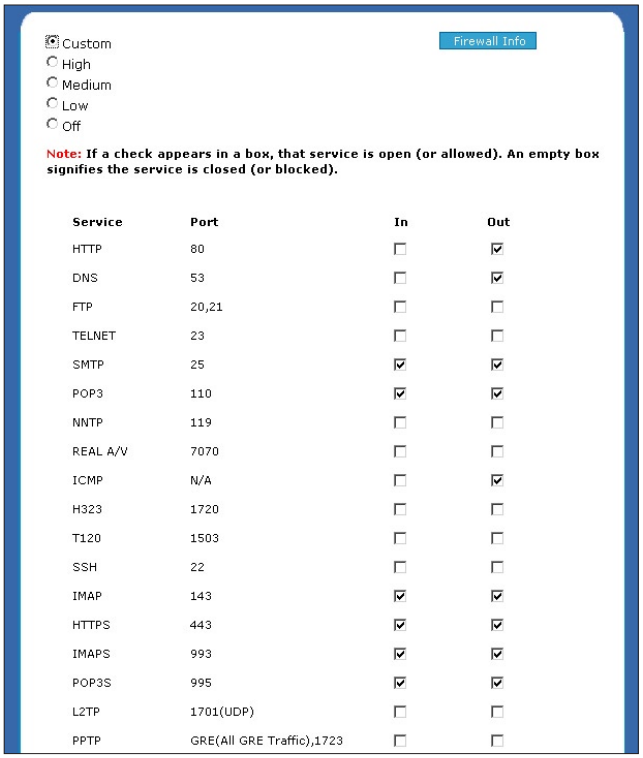
Apply the highest firewall security setting by selecting "High" in the Firewall screen. Services and their respective ports are open if a check appears in the appropriate check box, or closed if no check appears. If the service and/or port does not appear in the screen, it is open. This setting can be modified by clicking in check boxes to open or close particular services/ports.



Downloaded from www.Manualslib.com manuals search engine

Custom Security Level

Apply a customized firewall security setting by selecting "Custom" in the Firewall screen, which lists all services and ports available on the Modem. Services and their respective ports are open if a check appears in the appropriate check box, or closed if no check appears. If the service and/or port does not appear in the screen, it is open. This setting can be modified by clicking in check boxes to open or close particular services/ports.



Downloaded from www.Manualslib.com manuals search engine

This page left intentionally blank.

Downloaded from www.Manualslib.com manuals search engine

Setting up a Non-Windows System

G

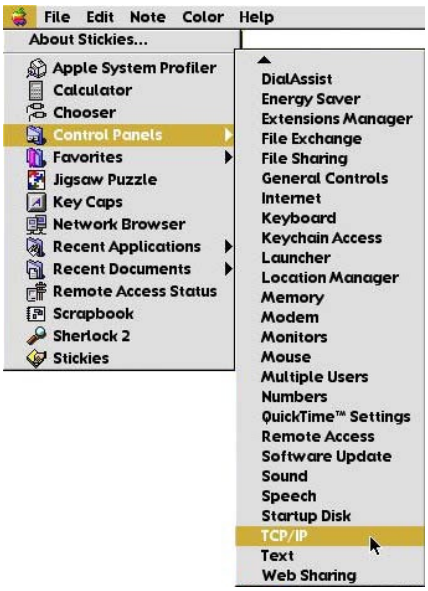
The Modem supports both the Classic Macintosh operating systems (9.2.1 and below), as well as OS X.

☞ ***Note***: When installing any software, consult the user manual and help files supplied with the software for detailed information. Actiontec provides the following information as a guideline only.

Classic

To configure the Modem, Open Transport 2.5.2 or above must be loaded on the computer.

1. Click **Apple**, **Control Panels**, then **TCP/IP**.



Downloaded from www.Manualslib.com manuals search engine

2. When the "TCP/IP" window appears, select **Edit** from menu bar, then select **User Mode**.

3. When the "User Mode" window appears, select **Advanced**, then click **OK**.

4. In the "TCP/IP" window, select **Ethernet** from the "Connect via" drop-down list.

5. Select **Using DHCP Server** from the "Configure" drop-down list.

6. Ensure the "Use 802.3" option is **not** checked.

7. Disregard any addresses in the IP Address text boxes. They will be reacquired when the first connection is made.

8. Click **Options** and when the "TCP/IP Options" window appears, select **Active**. Ensure the "Load only when needed" option is **not** checked, then click **OK**.

9. Close the "TCP/IP" window and when prompted to save changes, click **Save**.

10. Restart the computer. The TCP/IP settings are configured.

Next, go to "Connecting to the ISP."

Downloaded from www.Manualslib.com manuals search engine

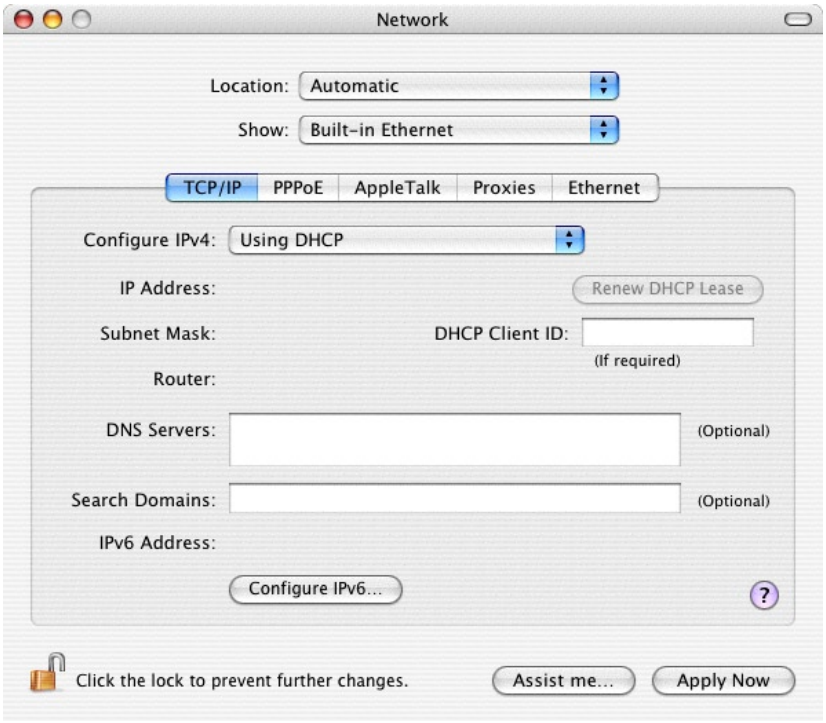
OS X

1. From the Apple Menu, select **System Preferences**.

2. When the "System Preferences" window appears, click **Network**.

Downloaded from www.Manualslib.com manuals search engine

3. The Network window appears. Select **Built-In Ethernet** from the "Show" drop-down list.



4. Select **TCP/IP** and, from the "Configure" drop-down list, select **Using DHCP**.

5. Click **Apply Now** and close the "System Preferences" application. The TCP/IP settings are configured.

Next, go to "Connecting to the ISP," below.

Connecting to the ISP

To connect the Modem to the ISP:

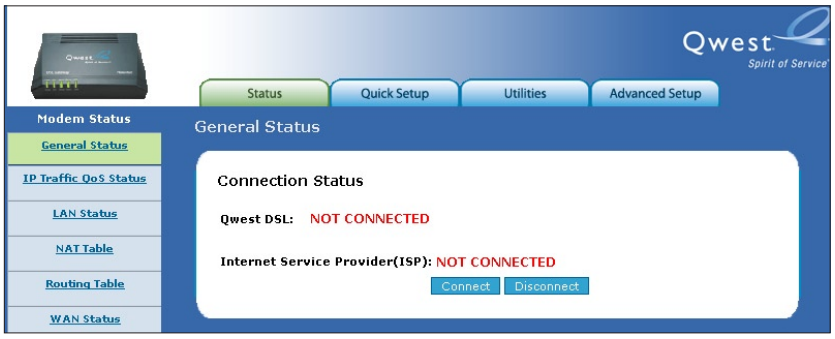
1. Open a Web browser. In the "Address" text box type:

   `http://192.168.0.1`

   then press **Enter** on the keyboard.

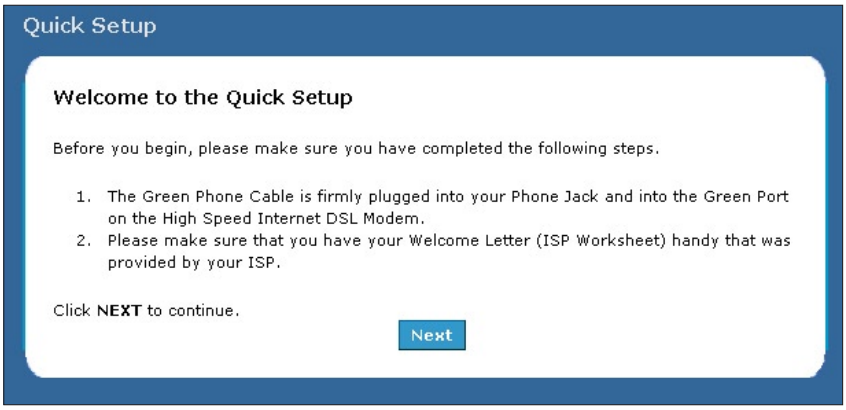
Downloaded from www.Manualslib.com manuals search engine

2. The Home screen appears, set to the "Status" tab. Select **Quick Setup** from the row of tabs at the top.

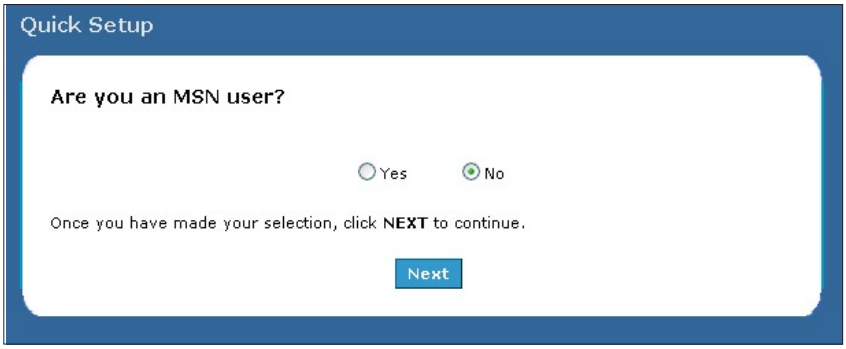


☞ ***Note***: If the Home screen does not appear, make sure the Ethernet cable is properly connected to the Modem.

3. The "Welcome to the Quick Setup" screen appears. Follow the on-screen instructions, then click **Next**.

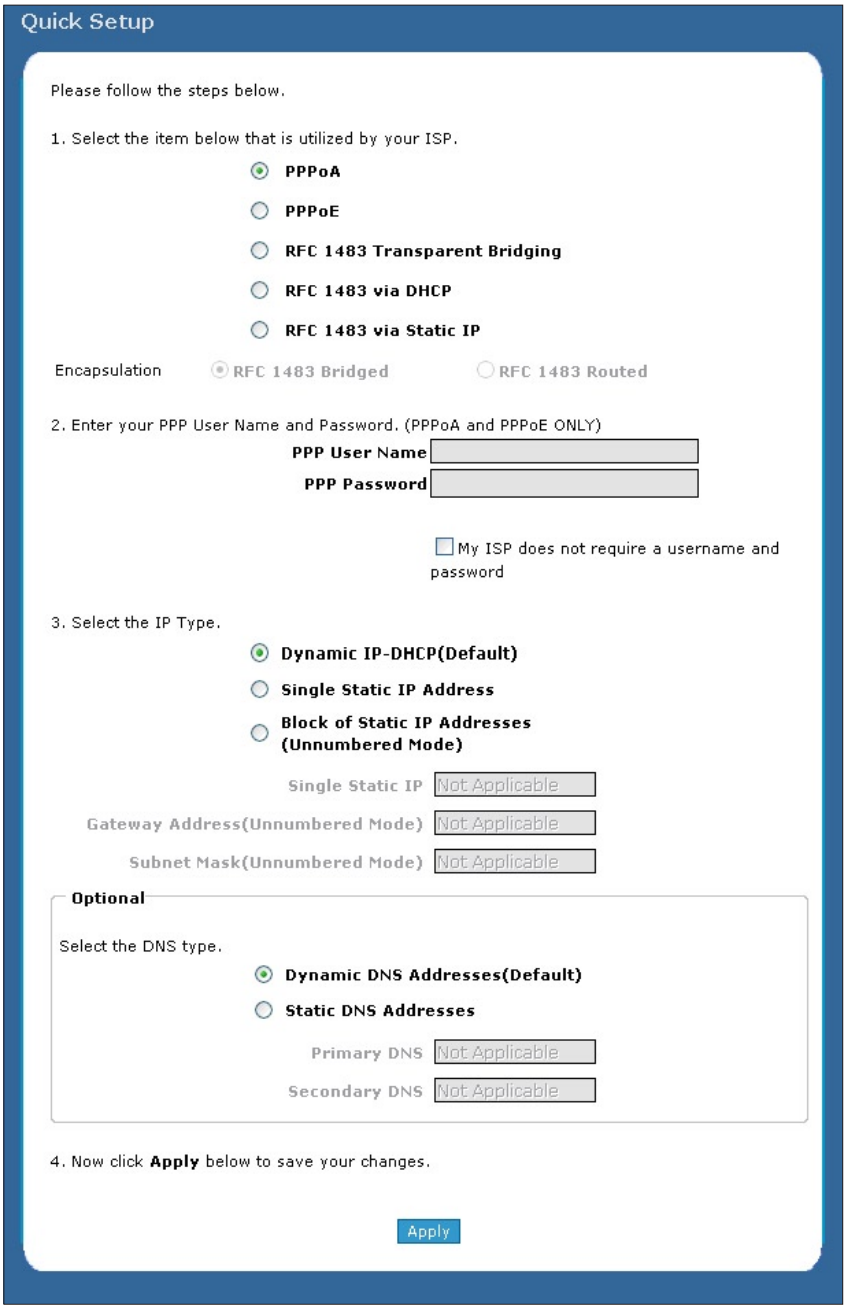

Quick Setup
Welcome to the Quick Setup
Before you begin, please make sure you have completed the following steps.
1. The Green Phone Cable is firmly plugged into your Phone Jack and into the Green Port on the High Speed Internet DSL Modem.
2. Please make sure that you have your Welcome Letter (ISP Worksheet) handy that was provided by your ISP.
Click NEXT to continue.
Next

4. In the next screen ("Are you an MSN user?"), click the "No" radio button, then click **Next**.



Downloaded from www.Manualslib.com manuals search engine

5. In the next screen, select the type of connection provided by the ISP by clicking in the radio button next to "PPPoA" or "PPPoE." If unsure about the selection, check the information provided by the ISP.



6. If applicable, enter the user name and password provided by the ISP in the appropriate text boxes, then click in the radio button next to either "Dynamic IP-DHCP" or "Single Static IP Address." Click **Apply**.

The Modem is ready to use when the Internet light on the front of the Modem glows solid green.

Downloaded from www.Manualslib.com manuals search engine

Additional Technical Support Options

H

This appendix contains information about additional technical support options.

Self Help

To obtain more answers to DSL configuration questions on your own, visit the **Qwest DSL Actiontec support page** at:

http://www.qwest.com/dsl/customerservice/actiontecgt701-wg.html

A Help page is also available via the Modem's Graphical User Interface. To access it, enter **192.168.0.1** in the "Address" text box of a Web browser, then click **Utilities**. On the left side of the "Utilities" screen, click **Qwest DSL Help Online.**

Basic Setup Support: Getting Online

If you are not able to access the Internet, check the DSL light on the front of the Modem. If it is solid green, call your ISP immediately. If it is not solid green, call Qwest's DSL Technical Support at 1-800-247-7285.

For other basic setup support:

Problem	Contact
DHCP Addressing Configuration	Your ISP
DSL Service Outage Support/Repair of the DSL Service	Qwest
Installation Support of the DSL Service	Qwest
Static IP Addressing Configuration	Your ISP
Transparent Bridging Configuration	Your ISP

☞ ***Note***: Before contacting technical support, make sure you can access the Internet via the Modem.

Downloaded from www.Manualslib.com manuals search engine

Advanced Feature Support

Qwest Technical Support (1-800-247-7285) provides configuration assistance support for the following advanced features:

- Website Blocking
- VPN Passthrough
- NAT (Network Address Translation)
- Firewall
- LAN IP Address
- Services Blocking
- DHCP
- Remote Management
- VIP

These features are supported with the Modem only. Implementing the above features within your network (LAN) is not supported by Qwest.

Upgrade Support

Upgrade installation support is available from Actiontec free of charge if the equipment was purchased from Actiontec.

Networking (LAN) Support

If you have a network and require remote support in one of the areas listed below, contact the **Actiontec Pay For Support Cente**r at 1-888-825-9075. Actiontec networking support is provided for $29.95 per incident and covers:

- LAN support of multiple computers and peripherals
- Microsoft Windows networking
- Advanced LAN configuration

Downloaded from www.Manualslib.com manuals search engine

This service also provides support (at $29.95 per incident) for the following advanced features:

- Port Forwarding (Static NAT)
- Static Routing
- MAC Address Cloning
- DMZ Hosting
- NAT Routes
- RIP (Dynamic Routing)

This service does not include on-site field technician support.

To purchase Actiontec wireless adapters and peripherals, go to:

www.actiontecstore.com/qwest

Downloaded from www.Manualslib.com manuals search engine

This page left intentionally blank.

Downloaded from www.Manualslib.com manuals search engine

Notices

Regulatory Compliance Notices

Class B Equipment

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by implementing one or more of the following measures:

- Reorient or relocate the receiving antenna;
- Increase the separation between the equipment and receiver;
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected;
- Consult the dealer or an experienced radio or television technician for help.

Modifications

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Actiontec Electronics, Inc., may void the user's authority to operate the equipment.

Declaration of conformity for products marked with the FCC logo – United States only.

Downloaded from www.Manualslib.com manuals search engine

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference

2. This device must accept any interference received, including interference that may cause unwanted operation

☞ ***Note***: To comply with FCC RF exposure compliance requirements, the antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

For questions regarding your product or the FCC declaration, contact:

Actiontec Electronics, Inc.
760 North Mary Ave.
Sunnyvale, CA 94086
United States
Tel: (408) 752-7700
Fax: (408) 541-9005

Miscellaneous Legal Notices

© 2006 Actiontec Electronics, Inc. Actiontec Installation Buddy, Connection 1-2-3, Solutions for the Digital Life, Actiontec Digital Gear, and the Actiontec logo are trademarks or registered trademarks of Actiontec Electronics, Inc.

All other names are the property of their respective owners.

Downloaded from www.Manualslib.com manuals search engine

Limited Warranty

Hardware: Actiontec Electronics, Inc., warrants to the end user ("Customer") that this hardware product will be free from defects in workmanship and materials, under normal use and service, for twelve (12) months from the date of purchase from Actiontec Electronics or its authorized reseller.

Actiontec Electronics' sole obligation under this express warranty shall be, at Actiontec's option and expense, to repair the defective product or part, deliver to Customer an equivalent product or part to replace the defective item, or if neither of the two foregoing options is reasonably available, Actiontec Electronics may, in its sole discretion, refund to Customer the purchase price paid for the defective product. All products that are replaced will become the property of Actiontec Electronics, Inc. Replacement products may be new or reconditioned. Actiontec Electronics warrants any replaced or repaired product or part for ninety (90) days from shipment, or the remainder of the initial warranty period, whichever is longer.

Software: Actiontec Electronics warrants to Customer that each software program licensed from it will perform in substantial conformance to its program specifications, for a period of ninety (90) days from the date of purchase from Actiontec Electronics or its authorized reseller. Actiontec Electronics warrants the media containing software against failure during the warranty period. The only updates that will be provided are at the sole discretion of Actiontec Electronics and will only be available for download at the Actiontec Web site, www.actiontec.com. Actiontec Electronics' sole obligation under this express warranty shall be, at Actiontec Electronics' option and expense, to refund the purchase price paid by Customer for any defective software product, or to replace any defective media with software which substantially conforms to applicable Actiontec Electronics published specifications. Customer assumes responsibility for the selection of the appropriate applications program and associated reference materials. Actiontec Electronics makes no warranty or representation that its software products will meet Customer's requirements or work in combination with any hardware or applications software products provided by third parties, that the operation of the software products will be uninterrupted or error free, or that all defects in the software products will be corrected. For any third-party products listed in the Actiontec Electronics software product documentation or specifications as being compatible, Actiontec Electronics will make reasonable efforts to provide compatibility, except where the non-compatibility is caused by a "bug" or defect in the third party's product or from use of the software product not in accordance with Actiontec Electronics published specifications or user guide.

Downloaded from www.Manualslib.com manuals search engine

THIS ACTIONTEC ELECTRONICS PRODUCT MAY INCLUDE OR BE BUNDLED WITH THIRD-PARTY SOFTWARE, THE USE OF WHICH IS GOVERNED BY A SEPARATE END-USER LICENSE AGREEMENT.

THIS ACTIONTEC ELECTRONICS WARRANTY DOES NOT APPLY TO SUCH THIRD-PARTY SOFTWARE. FOR THE APPLICABLE WARRANTY, PLEASE REFER TO THE END-USER LICENSE AGREEMENT GOVERNING THE USE OF SUCH SOFTWARE.

Obtaining Warranty Service: Customer may contact Actiontec Electronics Technical Support Center within the applicable warranty period to obtain warranty service authorization. Dated proof of purchase from Actiontec Electronics or its authorized reseller may be required. Products returned to Actiontec Electronics must be pre-authorized by Actiontec Electronics with a Return Merchandise Authorization (RMA) number marked on the outside of the package, and sent prepaid and packaged appropriately for safe shipment, and it is recommended that they be insured or sent by a method that provides for tracking of the package. The repaired or replaced item will be shipped to Customer, at Actiontec Electronics' expense, not later than thirty (30) days after Actiontec Electronics receives the defective product.

Return the product to:
(In the United States)
Actiontec Electronics, Inc.
760 North Mary Avenue
Sunnyvale, CA 94085

Actiontec Electronics shall not be responsible for any software, firmware, information, memory data, or Customer data contained in, stored on, or integrated with any products returned to Actiontec Electronics for repair, whether under warranty or not.

WARRANTIES EXCLUSIVE: IF AN ACTIONTEC ELECTRONICS PRODUCT DOES NOT OPERATE AS WARRANTED ABOVE, CUSTOMER'S SOLE REMEDY FOR BREACH OF THAT WARRANTY SHALL BE REPAIR, REPLACEMENT, OR REFUND OF THE PURCHASE PRICE PAID, AT ACTIONTEC ELECTRONICS' OPTION. TO THE FULL EXTENT ALLOWED BY LAW, THE FOREGOING WARRANTIES AND REMEDIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, TERMS OR CONDITIONS, EXPRESS OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, STATUTORY OR OTHERWISE, INCLUDING WARRANTIES, TERMS OR CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, SATISFACTORY QUALITY, CORRESPONDENCE WITH DESCRIPTION, AND NON-INFRINGEMENT, ALL OF WHICH ARE EXPRESSLY DISCLAIMED. ACTIONTEC ELECTRONICS

Downloaded from www.Manualslib.com manuals search engine

NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON TO ASSUME FOR IT ANY OTHER LIABILITY IN CONNECTION WITH THE SALE, INSTALLATION, MAINTENANCE OR USE OF ITS PRODUCTS.

ACTIONTEC ELECTRONICS SHALL NOT BE LIABLE UNDER THIS WARRANTY IF ITS TESTING AND EXAMINATION DISCLOSE THAT THE ALLEGED DEFECT OR MALFUNCTION IN THE PRODUCT DOES NOT EXIST OR WAS CAUSED BY CUSTOMER'S OR ANY THIRD PERSON'S MISUSE, NEGLECT, IMPROPER INSTALLATION OR TESTING, UNAUTHORIZED ATTEMPT TO OPEN, REPAIR OR MODIFY THE PRODUCT, OR ANY OTHER CAUSE BEYOND THE RANGE OF THE INTENDED USE, OR BY ACCIDENT, FIRE, LIGHTNING, OTHER HAZARDS, OR ACTS OF GOD.

LIMITATION OF LIABILITY: TO THE FULL EXTENT ALLOWED BY LAW, ACTIONTEC ELECTRONICS ALSO EXCLUDES FOR ITSELF AND ITS SUPPLIERS ANY LIABILITY, WHETHER BASED IN CONTRACT OR TORT (INCLUDING NEGLIGENCE), FOR INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL, OR PUNITIVE DAMAGES OF ANY KIND, OR FOR LOSS OF REVENUE OR PROFITS, LOSS OF BUSINESS, LOSS OF INFORMATION OR DATA, OR OTHER FINANCIAL LOSS ARISING OUT OF OR IN CONNECTION WITH THE SALE, INSTALLATION, MAINTENANCE, USE, PERFORMANCE, FAILURE, OR INTERRUPTION OF ITS PRODUCT, EVEN IF ACTIONTEC ELECTRONICS OR ITS AUTHORIZED RESELLER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, AND LIMITS ITS LIABILITY TO REPAIR, REPLACEMENT, OR REFUND OF THE PURCHASE PRICE PAID, AT ACTIONTEC ELECTRONICS' OPTION. THIS DISCLAIMER OF LIABILITY FOR DAMAGES WILL NOT BE AFFECTED IF ANY REMEDY PROVIDED HEREIN SHALL FAIL OF ITS ESSENTIAL PURPOSE.

Disclaimer: Some countries, states or provinces do not allow the exclusion or limitation of implied warranties or the limitation of incidental or consequential damages for certain products supplied to consumers, or the limitation of liability for personal injury, so the above limitations and exclusions may be limited in their application to you. When the implied warranties are not allowed to be excluded in their entirety, they will be limited to the duration of the applicable written warranty. This warranty gives you specific legal rights which may vary depending on local law.

Dispute Resolution: The customer may contact the Director of Technical Support in the event the Customer is not satisfied with Actiontec Electronics' response to the complaint. In the event that the Customer is still not satisfied with the response of the Director of Technical Support, the Customer is instructed to contact the Director of Marketing. In the event that the Customer is still not satisfied with the response of the Director of Marketing, the Customer is instructed to contact the Chief Financial Officer and/or President.

Downloaded from www.Manualslib.com manuals search engine

Governing Law: This Limited Warranty shall be governed by the laws of the State of California, U.S.A., excluding its conflicts of laws and principles, and excluding the United Nations Convention on Contracts for the International Sale of Goods.

Downloaded from www.Manualslib.com manuals search engine